



GSX1300BK

OWNER'S MANUAL

Part No. 99011-23H50-01A
June, 2007 (TK) EN

This manual should be considered a permanent part of the motorcycle and should remain with the motorcycle when resold or otherwise transferred to a new owner or operator. The manual contains important safety information and instructions which should be read carefully before operating the motorcycle.

IMPORTANT

BREAK-IN (RUNNING-IN) INFORMATION FOR YOUR MOTORCYCLE

The first 1600 km (1000 miles) are the most important in the life of your motorcycle. Proper break-in operation during this time will help ensure maximum life and performance from your new motorcycle. Suzuki parts are manufactured of high quality materials, and machined parts are finished to close tolerances. Proper break-in operation allows the machined surfaces to polish each other and mate smoothly.

Motorcycle reliability and performance depend on special care and restraint exercised during the break-in period. It is especially important that you avoid operating the engine in a manner which could expose the engine parts to excessive heat.

Please refer to the BREAK-IN (RUNNING-IN) section for specific break-in recommendations.

WARNING/CAUTION/NOTE

Please read this manual and follow its instructions carefully. To emphasize special information the words WARNING, CAUTION and NOTE carry special meanings and should be carefully reviewed.

WARNING

The personal safety of the rider may be involved. Disregarding this information could result in injury to the rider.

CAUTION

These instructions point out special service procedures or precautions that must be followed to avoid damaging the machine.

NOTE: This provides special information to make maintenance easier or important instructions clearer.

FOREWORD

Motorcycling is one of the most exhilarating sports and to ensure your riding enjoyment, you should become thoroughly familiar with the information presented in this Owner's Manual before riding the motorcycle.

The proper care and maintenance that your motorcycle requires is outlined in this manual. By following these instructions explicitly you will ensure a long trouble free operating life for your motorcycle. Your authorized Suzuki dealer has experienced technicians that are trained to provide your machine with the best possible service with the right tools and equipment.

All information, illustrations and specifications contained in this manual are based on the latest product information available at the time of publication. Due to improvements or other changes, there may be some discrepancies between information in this manual and your motorcycle. Suzuki reserves the right to make changes at any time.

Please note that this manual applies to all specifications or all respective destinations and explains all equipment. Therefore, your model may have different standard features than shown in this manual.

SUZUKI MOTOR CORPORATION

© COPYRIGHT SUZUKI MOTOR
CORPORATION 2007





TABLE OF CONTENTS

CONSUMER INFORMATION	1
CONTROLS	2
FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS	3
BREAK-IN (RUNNING-IN) AND INSPECTION BEFORE RIDING	4
RIDING TIPS	5
INSPECTION AND MAINTENANCE	6
TROUBLESHOOTING	7
MOTORCYCLE CLEANING AND STORAGE PROCEDURE	8
SPECIFICATIONS	
INDEX	

CONSUMER INFORMATION

ACCESSORY USE AND MOTORCYCLE LOADING	1-2
SAFE RIDING RECOMMENDATION FOR MOTORCYCLE RIDERS	1-7
SERIAL NUMBER LOCATION	1-9
NOISE CONTROL SYSTEM (AUSTRALIA ONLY)	1-10

CONSUMER INFORMATION

ACCESSORY USE AND MOTORCYCLE LOADING

Accessory Use

The addition of unsuitable accessories can lead to unsafe operating conditions. It is not possible for Suzuki to test each accessory on the market or combinations of all the available accessories; however, your dealer can assist you in selecting quality accessories and installing them correctly. Use extreme caution when selecting and installing the accessories on your motorcycle and consult your Suzuki dealer if you have any questions.

WARNING

Improper accessory installation can make your motorcycle unsafe and can lead to an accident.

Use Suzuki genuine accessories or equivalent, designed and tested for your motorcycle. Follow the guidelines in this section.

Accessory installation guideline

- Install aerodynamic affecting accessories, such as a fairing, windshield, backrests, saddlebags, and travel trunks, as low as possible, as close to the motorcycle and as near the center of gravity as is feasible. Check that the mounting brackets and other attachment hardware are rigidly mounted.
 - Inspect for proper ground clearance and bank angle. Inspect that the accessory does not interfere with the operation of the suspension, steering or other control operations.
 - Accessories fitted to the handlebars or the front fork area can create serious stability problems. This extra weight will cause the motorcycle to be less responsive to your steering control. The weight may also cause oscillations in the front end and lead to instability problems. Accessories added to the handlebars or front fork of the machine should be as light as possible and kept to a minimum.
- Select an accessory which does not limit the freedom of rider movement.
 - Select an electric accessory which does not exceed motorcycle's electrical system capacity. Severe overloads may damage the wiring harness or create hazardous situations.
 - Do not pull a trailer or sidecar. This motorcycle is not designed to pull a trailer or sidecar.

Loading Limit

WARNING

Overloading or improper loading can cause loss of motorcycle control and this may result in an accident.

Follow loading limits and loading guidelines in this manual.

- Never exceed the G.V.W. (Gross Vehicle Weight) of this motorcycle. The G.V.W. is the combined weight of the machine, accessories, payload and rider. When selecting your accessories, keep in mind the weight of the rider as well as the weight of the accessories. The additional weight of the accessories may not only create an unsafe riding condition but may also affect the riding stability.

G.V.W.: 460 kg (1010 lbs)
at the tire pressure (cold)
Front: 2.50 kgf/cm² (36 psi)
Rear: 2.90 kgf/cm² (42 psi)

Loading Guidelines

- Balance the load between the left and right side of the motorcycle and fasten it securely.
- Place cargo weight as close to the center of the motorcycle as possible.
- Do not attach large or heavy items to the handlebars, front forks or rear fender.
- Check that both tires are properly inflated to the specified tire pressure for your loading conditions. Refer to page 6-53.
- Improperly loading your motorcycle can reduce your ability to balance and steer the motorcycle. You should ride at reduced speeds, less than 130 km/h (80 mph), when the cargo is loaded or accessory is fitted.
- Adjust suspension setting as necessary.



WARNING

Placing objects in the space behind the fairing can interfere with steering and can lose control.

Do not carry any objects in the space behind the fairing.

MODIFICATION

Modification of the motorcycle, or removal of original equipment may render the vehicle unsafe or illegal.

The frame of this motorcycle is made of an aluminium alloy. Therefore, never make any modifications such as drilling or welding to the frame as it weakens the strength of the frame significantly. Failure to heed this warning could result in an unsafe vehicle operating condition and subsequent accident. Suzuki will not be responsible in any way for personal injury or damage to the motorcycle caused by frame modifications. Bolt on accessories that do not modify the frame in any way may be installed provided that the GVW is not exceeded. For the GVW, refer to the **ACCESSORY USE AND MOTORCYCLE LOADING** section of this owner's manual.

WARNING

Modification to an aluminum alloy frame, such as drilling or welding, weakens the frame. This could result in an unsafe operating condition and may lead to an accident.

Never make any modifications to the frame.

SAFE RIDING RECOMMENDATION FOR MOTORCYCLE RIDERS

Motorcycle riding is great fun and an exciting sport. Motorcycle riding also requires that some extra precautions be taken to ensure the safety of the rider and passenger. These precautions are:

WEAR A HELMET

Motorcycle safety equipment starts with a quality helmet. One of the most serious injuries that can happen is a head injury. ALWAYS wear a properly approved helmet. You should also wear suitable eye protection.

RIDING APPAREL

Loose, fancy clothing can be uncomfortable and unsafe when riding your motorcycle. Choose good quality motorcycle riding apparel when riding your motorcycle.

INSPECTION BEFORE RIDING

Review thoroughly the instructions in the “INSPECTION BEFORE RIDING” section of this manual. Do not forget to perform an entire safety inspection to ensure the safety of the rider and its passenger.

FAMILIARIZE YOURSELF WITH THE MOTORCYCLE

Your riding skill and your mechanical knowledge form the foundation for safe riding practices. We suggest that you practice riding your motorcycle in a non-traffic situation until you are thoroughly familiar with your machine and its controls. Remember practice makes perfect.

KNOW YOUR LIMITS

Ride within the boundaries of your own skill at all times. Knowing these limits and staying within them will help you to avoid accidents.

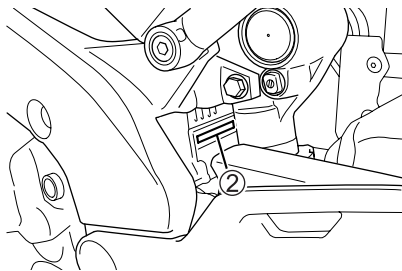
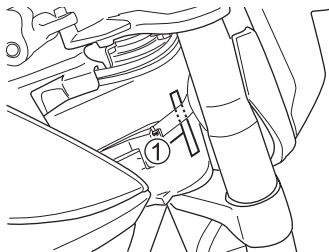
BE EXTRA SAFETY CONSCIOUS ON BAD WEATHER DAYS

Riding on bad weather days, especially wet ones, requires extra caution. Braking distances double on a rainy day. Stay off the painted surface marks, manhole covers and greasy appearing areas as they can be especially slippery. Use extreme caution at railway crossings and on metal gratings and bridges. Whenever in doubt about road condition, slow down!

RIDE DEFENSIVELY

The most common type of motorcycle accident occurs when a car traveling towards a motorcycle turns round corner in front of the motorcyclist. Ride defensively. Wise motorcyclist uses a strategy of assuming they are invisible to other drivers, even in broad daylight. Wear bright, reflecting clothing. Turn on the headlight and taillight every time even on a bright, sunny day to attract driver's attention. Do not ride in another driver's blind spot.

SERIAL NUMBER LOCATION



The frame and/or engine serial numbers are used to register the motorcycle. They are also used to assist your dealer when ordering parts or referring to special service information. The frame number ① is stamped on the steering head tube. The engine serial number ② is stamped on the crankcase assembly.

Please write down the numbers in the box provided below for your future reference.

Frame number:

Engine number:

NOISE CONTROL SYSTEM (AUSTRALIA ONLY)

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED

Owners are warned that the law may prohibit:

- (a) The removal or rendering inoperative by any person other than for purposes of maintenance, repair or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; and
- (b) The use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

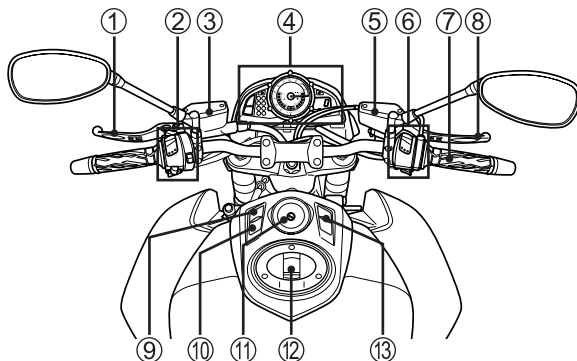


CONTROLS

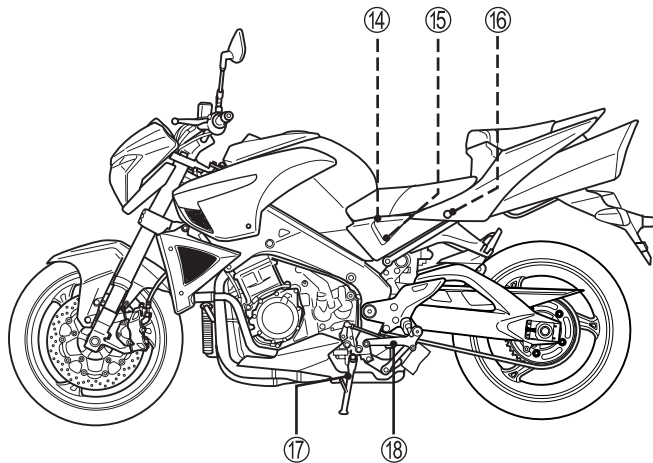
LOCATION OF PARTS	2-2
KEY (Canada)	2-5
KEY (EU and Australia)	2-6
IGNITION SWITCH	2-7
INSTRUMENT PANEL	2-10
SUZUKI DRIVE MODE SELECTOR	2-32
LEFT HANDLEBAR	2-34
RIGHT HANDLEBAR	2-38
FUEL TANK CAP	2-42
GEARSHIFT LEVER	2-44
REAR BRAKE PEDAL	2-45
SEAT LOCK AND HELMET HOLDER	2-45
LUGGAGE STRAPS	2-50
SIDE STAND	2-50
SUSPENSION ADJUSTMENT	2-52

CONTROLS

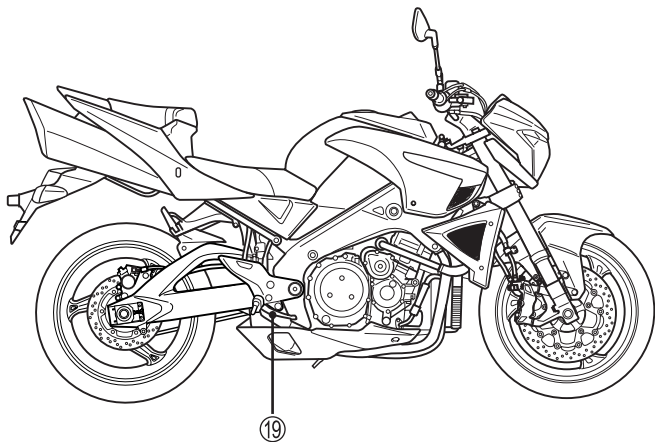
LOCATION OF PARTS



- | | |
|-------------------------------|------------------------------|
| ① Clutch lever | ⑧ Front brake lever |
| ② Left handlebar switches | ⑨ INFO switch |
| ③ Clutch fluid reservoir | ⑩ SET switch |
| ④ Instrument panel | ⑪ Ignition switch |
| ⑤ Front brake fluid reservoir | ⑫ Fuel tank cap |
| ⑥ Right handlebar switches | ⑬ Suzuki drive mode selector |
| ⑦ Throttle grip | |

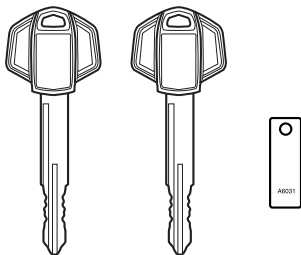


- ⑭ Helmet holder
- ⑮ Tools
- ⑯ Seat lock
- ⑰ Side stand
- ⑱ Gearshift lever



①9 Rear brake pedal

KEY (Canada)



This motorcycle comes equipped with a pair of identical ignition keys. Keep the spare key in a safe place.

The key number is stamped on a plate provided with the keys. This number is used when making replacement keys. Please write your key number in the box provided for your future reference.

Key No.:

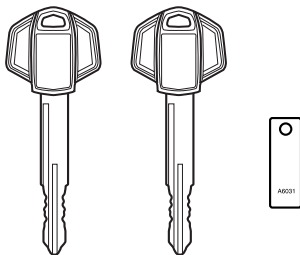
WARNING

Due to the location of the steering damper, some key chains could get caught between the steering damper and the steering stem nut. This could interfere with steering and cause loss of control.

Use your ignition key without key chains, fobs or other keys attached.

NOTE: Attaching key holder or some chain to the ignition key can damage plated parts and painted parts around the ignition switch. Use only the ignition key or a soft key holder to avoid plating and painting damage.

KEY (EU and Australia)



This motorcycle comes equipped with a pair of identical ignition keys. Keep the spare key in a safe place.

The key number is stamped on a plate provided with the keys. This number is used when making replacement keys. Please write your key number in the box provided for your future reference. If the all keys are lost, the ECM should be replaced.

Key No.:

WARNING

Due to the location of the steering damper, some key chains could get caught between the steering damper and the steering stem nut. This could interfere with steering and cause loss of control.

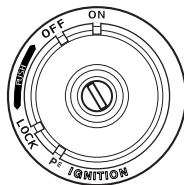
Use your ignition key without key chains, fobs or other keys attached.

NOTE: Attaching key holder or some chain to the ignition key can damage plated parts and painted parts around the ignition switch. Use only the ignition key or a soft key holder to avoid plating and painting damage.

NOTE:

- Immobilizer identification code is programmed into the key. Therefore, a key made by an ordinary locksmith will not work. Ask Suzuki dealer if you need to make a spare key.
- If you loose the key, ask your Suzuki dealer to have the lost one deactivated.
- If you own other vehicles with immobilizer keys, keep those keys away from the ignition switch when using your motorcycle, or they may interfere with your motorcycle immobilizer system.
- Two keys are originally registered to the immobilizer system. It is possible to add two more keys. Ask your Suzuki dealer to make and register additional spare keys.

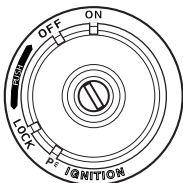
IGNITION SWITCH



The ignition switch has 4 positions:

“OFF” POSITION

All electrical circuits are cut off. The engine will not start. The key can be removed.



“ON” POSITION

The ignition circuit is completed and the engine can now be started. The headlight and taillight will automatically be turned on when the key is in this position. The key cannot be removed from the ignition switch in this position.

NOTE: Start the engine promptly after turning the key to the “ON” position, or the battery will lose power due to consumption by the headlight and taillight.

“LOCK” POSITION

To lock the steering, turn the handlebar all the way to the left. Push down and turn the key to the “LOCK” position and remove the key. All electrical circuits are cut off.

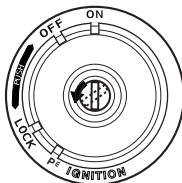
“P” (Parking) POSITION

When parking the motorcycle, lock the steering and turn the key to the “P” position. The key can now be removed and the position light and taillight will remain lit and the steering will be locked. This position is for night time roadside parking to increase visibility.

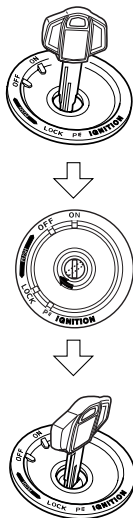
⚠ WARNING

Turning the ignition switch to the “P” (PARKING) or “LOCK” position while the motorcycle is moving can be hazardous. Moving the motorcycle while the steering is locked can be hazardous. You could lose your balance and fall, or you could drop the motorcycle.

Stop the motorcycle and place it on the side stand before locking the steering. Never attempt to move the motorcycle when the steering is locked.

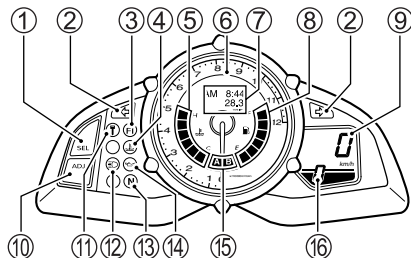


The key hole can be covered by turning the lid.



Align the lid hole position to the key hole position when inserting the key.

INSTRUMENT PANEL



The fuel injection system indicator light ③, coolant temperature indicator light ④, oil pressure indicator light ④, LCD and meter needle work as follows to confirm their function when the ignition switch is turned to the "ON" position.

- The fuel injection system indicator light ③, coolant temperature indicator light ④, oil pressure indicator light ⑭ come on for 3 seconds.
- The meter needle moves to the full scale position and returns to the home position.
- LCD segments will have appear/disappear action and then show normal display.

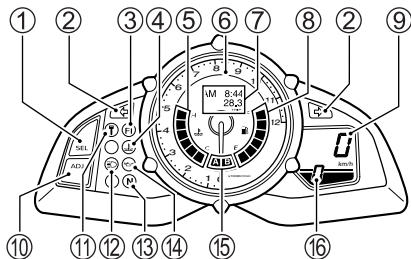
If the meter needle does not point to zero, follow the procedure below to reset the meter.

1. Press and hold the ADJ button ⑩ and turn on the ignition switch.
2. Hold the ADJ button ⑩ for 3 seconds.

TURN SIGNAL INDICATOR LIGHT ②

When the turn signals are being operated either to the right or to the left, the indicator will flash at the same time.

NOTE: If a turn signal light is not operating properly due to bulb filament or circuit failure, the indicator light flickers more quickly to notify the rider of the existence of a trouble.



COOLANT TEMPERATURE METER ⑤



The coolant temperature meter indicates engine coolant temperature. When the coolant temperature becomes high, the indicator light ④ comes on.

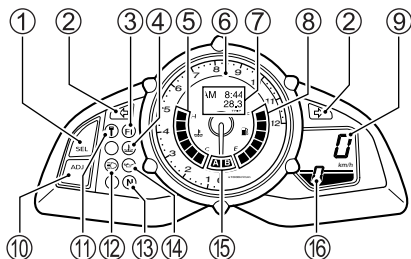
CAUTION

Running the engine with high engine coolant temperature can cause serious engine damage. If the engine coolant temperature indicator light comes on, stop the engine to let it cool.

Do not run the engine until the coolant temperature indicator goes off.

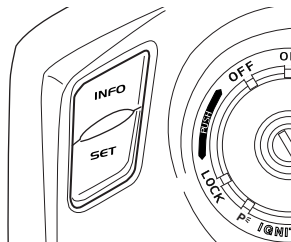
TACHOMETER ⑥

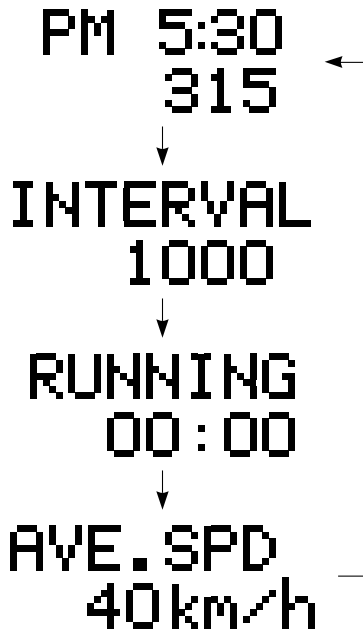
The tachometer indicates the engine speed in revolutions per minute (r/min).



INFORMATION DISPLAY ⑦

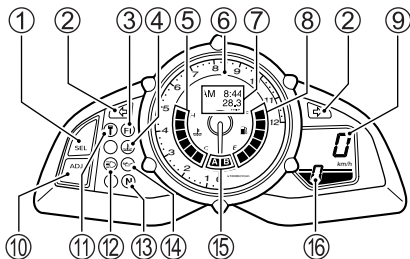
The information display has four modes: 1. clock, odometer/trip meter, and fuel injection system indicator, 2. maintenance interval, 3. running time, 4. average speed. The information display will be changed by pushing the INFO switch on the fuel tank.





The display will be changed as shown above when the INFO switch is pushed.

NOTE: Clock and trip meter can be adjusted only when the clock and odometer/trip meter is displayed.



Clock

The clock has a 12-hour display. Follow the procedure below to adjust the clock.

1. Push the SEL button ① and ADJ button ⑩, simultaneously for 2 seconds until the clock display blinks.
2. Adjust the hour display by pushing the SEL button ①.
3. Adjust the minute display by pushing the ADJ button ⑩.

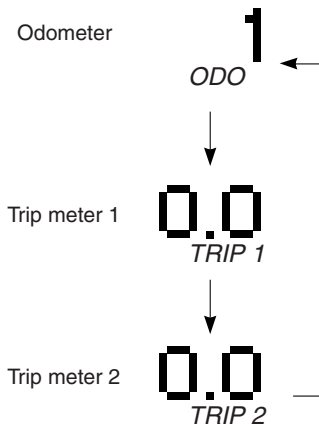
NOTE: When the SEL button ① and ADJ button ⑩ are held in, the display advances continuously.

4. Push the SEL button ① and ADJ button ⑩, simultaneously for 2 seconds until return to the clock mode.

Odometer/Trip Meter/ Fuel Injection System Indicator

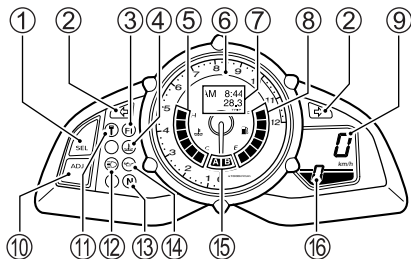
The indicator displays odometer/trip meter under normal condition. The indicator switches from the odometer/trip meter to the fuel injection system indicator if the fuel injection system has any failure. When the ignition switch is turned to the "ON" position, the test pattern shown below is displayed. The display data is memorized when the ignition switch is turned off and the memorized display data appears when the ignition switch is turned on again.

To change the display, push the SEL button ①. The display changes in the order below.



NOTE:

- Set the meter to odometer, then press and hold ADJ button ⑩ for 3 seconds to change between km/h and mph. (Except for Canada and Australia)
- Select km/h or mph, as appropriate, to comply with traffic regulations.
- Check the km/h and mph display after adjusting the instrument panel display.



Odometer

The odometer registers the total distance that the motorcycle has been ridden.

Trip Meters

The 2 trip meters are resettable odometers. They can register 2 kinds of distances at the same time. For instance, trip meter 1 can register the trip distance and trip meter 2 can register the distance between fuel stops.

To reset the meter to zero, push the ADJ button ⑩ for 2 seconds while the display indicates the trip meter 1, or 2, you want to reset.

WARNING

Operating the display while riding can be hazardous. Removing a hand from the handlebars can reduce your ability to control the motorcycle.

Always keep both hands on the handlebars during riding.

Fuel Injection System Indicator

FI

If the fuel injection system fails, the red indicator light ③ comes on and the display ⑦ indicates “FI” in the odometer/trip meter display area in the following 2 modes;

- A. The display ⑦ indicates “FI” at the odometer/trip meter display and the odometer/trip meter alternately, and the red indicator light ③ comes on and remains lit.
- B. The display ⑦ indicates “FI” continuously and the red indicator light ③ blinks.

The engine may continue to run in mode A, but the engine will not run in mode B.

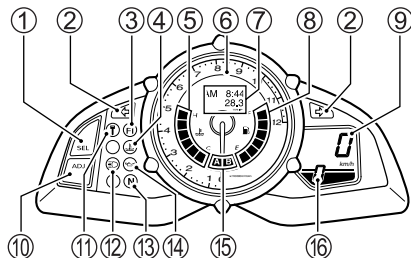
CAUTION

Riding the motorcycle with the display indicating a problem with the fuel injection system can damage the engine.

Whenever the red indicator light is lit and the display indicates “FI”, have your authorized Suzuki dealer or a qualified mechanic inspect the fuel injection system as soon as possible.


NOTE:

- If the display indicates “FI” and the odometer/trip meter alternately, and the red indicator light comes on and remains lit, keep the engine running and bring your motorcycle to an authorized Suzuki dealer. If the engine stalls, try restarting the engine after turning the ignition switch off and on.
- If the display indicates “FI” continuously and the red indicator light blinks, the engine will not start.

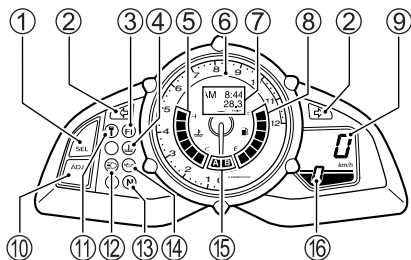


CHEC

When the display indicates “CHEC” in the odometer/trip meter display area, check following items;

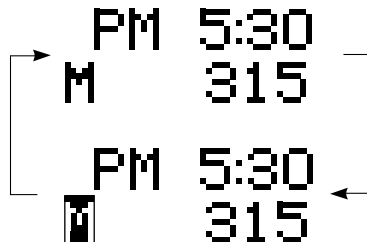
- Make sure that the engine stop switch is in the “” position.
- Make sure that the transmission is in neutral or the side stand is fully up.

If the display still indicates “CHEC” after checking the above items, inspect the ignition fuse and the connection of the lead wire couplers.

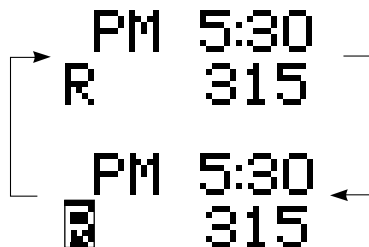


Maintenance Interval

The maintenance interval display comes on to notify maintenance timing. Initial preset maintenance interval is 1000 km (600 miles).

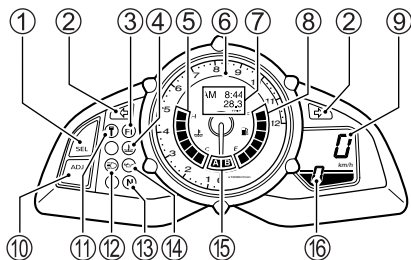


M letter display come on to notify preset maintenance timing. Positive “M” mark and negative “M” mark comes on alternately when maintenance interval meter comes zero. Reset the display to turn off the “M” mark.



To reset the maintenance interval:

1. Turn off the ignition switch.
2. Push SET switch and turn on the ignition switch. Wait 3 seconds until the display repeats positive “R” mark and negative “R” mark 3 times and goes off.



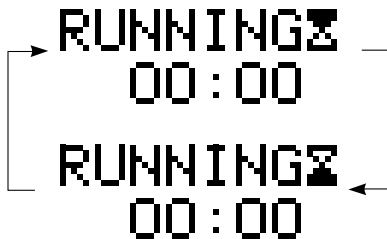
To change the maintenance interval preset:

1. Turn on the ignition switch. Push INFO switch to indicate maintenance interval.
2. Push and keep both INFO switch and SET switch for more than 2 seconds. The display starts repeating positive "S" mark and negative "S" mark. Display shows preset interval value.
3. Push SET switch to decrease from 6000 km (3600 miles) to 500 km (300 miles) in 500 km (300 miles) steps.
4. Push INFO switch to increase from 500 km (300 miles) to 6000 km (3600 miles) in 500 km (300 miles) steps.
5. Push both INFO switch and SET switch for more than 2 seconds.

NOTE: The preset interval can be adjusted after odometer reaches 1000 km (600 miles).

Running Time

Running timer counts total time when the running time switch and ignition switch are turned on. The running time counts from 00:00 to 99:59 and it stops at 99:59.



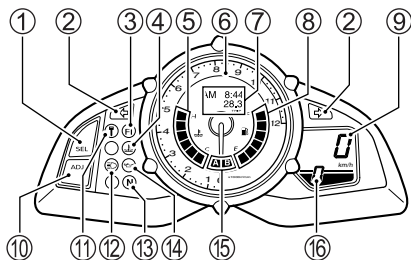
To turn on/off running time:

1. Push SET switch to turn on the running timer. ⌚ mark will start blinking.
2. Push the SET switch to stop counting. ⌚ mark goes off.
3. Push the SET switch to restart counting. ⌚ mark starts blinking.

To reset the running time:

1. Push the SET switch for more than 2 seconds. Running time displays 00:00 when the running time is reset.

NOTE: Switching running time will switch average speed at the same time.



Average Speed

Average speed displays motorcycle average speed after the average speed switch and ignition switch is turned on.



To turn on/off average speed:

1. Push SET switch to turn on the average speed counter. **X** mark will start blinking.
2. Push the SET switch to stop counting. **X** mark goes off.
3. Push the SET switch to restart counting. **X** mark starts blinking.







To reset the average speed:

1. Push the SET switch for more than 2 seconds. Average speed displays — — —.

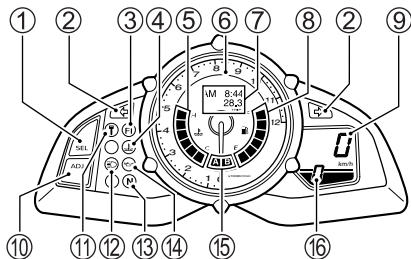
NOTE: Switching average speed will switch running time at the same time.

FUEL METER ⑧

The fuel meter indicates the amount of fuel remaining in the fuel tank. The fuel meter displays all 6 segments when the fuel tank is full. The mark flickers when the fuel level drops below 3.3 L (3.5/2.9 US/Imp. qt). The mark and segment flicker when the fuel drops below 1.8 L (1.9/1.6 US/Imp. qt).

Fuel tank	Approximately 1.8 L	Approximately 3.3 L	Full
Fuel gauge	 Flicker		
Mark	 Flicker	 Flicker	

NOTE: The fuel meter will not indicate correctly when the motorcycle is placed with the side stand.



SPEEDOMETER ⑨

The speedometer indicates the road speed in miles per hour and/or kilometers per hour.

IMMOBILIZER INDICATOR ⑪ (EU and Australia)

The immobilizer indicator blinks 2 times when the ignition switch is turned on. Then indicator comes on 2 seconds and goes off.

Immobilizer system is designed to help prevent motorcycle theft by electronically disabling the engine starting system. The engine can be started only with your original keys which have an electronic identification code programmed into it. The key communicates the identification code to the ECM when the key is turned to "ON" position.

NOTE:

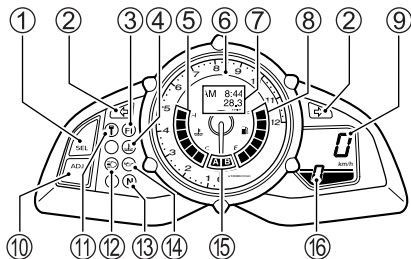
- *It is impossible to start the engine when the indicator remains blinking.*
- *If the indicator remains blinking, it means immobilizer system communication error between key and ECM or use of wrong key. Turn off the ignition switch and then turn on to communicate immobilizer system properly.*
- *Two ignition keys are originally registered to the immobilizer system. It is possible to add two more keys. The indicator blinks numbers of registered key when the ignition switch is turned on.*
- *The indicator blinks for 24 hours after the ignition switch is turned off.*
- *If your own spare key or other vehicle's immobilizer key, keep away those keys from the ignition switch when operating. Those keys may interfere with your motorcycle immobilizer system.*

HIGH BEAM INDICATOR LIGHT ⑫

This blue indicator light will be lit when the headlight high beam is turned on.

NEUTRAL INDICATOR LIGHT ⑬

The green light will come on when the transmission is in neutral. The light will go out when you shift into any gear other than neutral.



OIL PRESSURE INDICATOR LIGHT ⑭

The oil pressure indicator light comes on when the engine oil pressure is below the normal operating range. The indicator light comes on when the ignition switch is turned on and the engine is not running. As soon as the engine starts, the indicator light should go off.

CAUTION

Riding the motorcycle when the oil pressure indicator light is lit can damage the engine and transmission.

Whenever the oil pressure indicator lights up, indicating low oil pressure, stop the engine immediately. Check the oil level and make sure the proper amount of oil is in the engine. If the light still does not go out, have your authorized SUZUKI dealer or a qualified mechanic troubleshoot your motorcycle.

SUZUKI DRIVE MODE INDICATOR ⑮

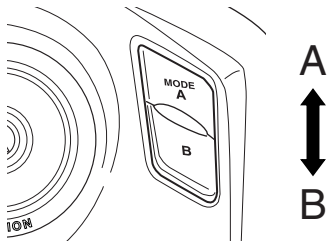
The suzuki drive mode indicator displays drive mode; A or B. Refer to the SUZUKI DRIVE MODE SELECTOR section for detail.

GEAR POSITION INDICATOR ⑯

The gear position indicator indicates gear position. This indicator displays “0” when the transmission is in neutral.

SUZUKI DRIVE MODE SELECTOR

Engine power characteristics can be changed in 2 modes by operating the suzuki drive mode selector to meet various riding conditions and rider's preference.



Suzuki Drive Mode Selector Operation

Drive mode is preset at A-mode when the ignition switch and the engine stop switch are turned on. Follow the procedure below to operate the suzuki drive mode selector.

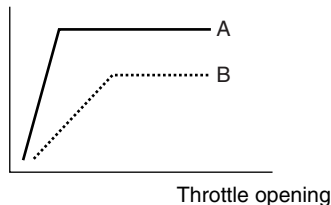
1. Turn on the ignition switch and the engine stop switch.
2. Push the suzuki drive mode selector to change drive mode. Push A or B to select the mode. The suzuki drive mode indicator indicates actual drive mode.

NOTE:

- *Stop the motorcycle when operating the suzuki drive mode selector. The suzuki drive mode selector operation will be cancelled when the motorcycle is moving.*
- *The suzuki drive mode indicator blinks when drive mode change operation is failed.*
- *Turning off the ignition switch or the engine stop switch will return the drive mode to A-mode. Start the engine and reset the drive mode.*

Drive Mode

Engine power



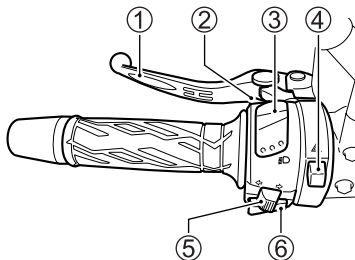
A-mode

A-mode provides sharp throttle response at all throttle opening range to obtain maximum engine power.

B-mode

B-mode provides soft throttle response at all throttle opening range by reducing engine power.

LEFT HANDLEBAR



CLUTCH LEVER ①

The clutch lever is used for disengaging the drive to the rear wheel when starting the engine or shifting transmission gears. Squeezing the lever disengages the clutch.

HEADLIGHT FLASHER SWITCH ②

Press the switch to flash the headlight high beam. The headlight high beam will be lit when the dimmer switch is in “LO” position.

DIMMER SWITCH ③

“” position

The headlight low beam and taillight turn on.

“” position

The headlight high beam and taillight turn on. The high beam indicator light also turns on.

CAUTION

Holding the dimmer switch between HI and LO position will light both HI and LO headlight beam. This operation can damage the motorcycle.

Use the dimmer switch only at HI or LO position.

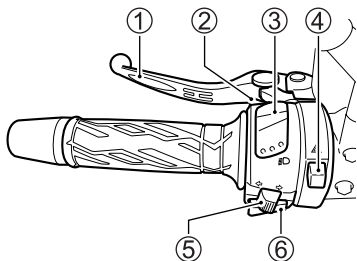
CAUTION

Sticking some tape or placing objects in front of the headlight can damage the headlight.

Do not stick any tapes to the headlight. Do not place objects in front of the headlight.

HAZARD WARNING SWITCH ④

All four turn signal lights and indicators will flash simultaneously when the switch is turned on with the ignition switch in the "ON" or "P" position. Use the hazard warning lights to warn other traffic during emergency parking or when your vehicle could otherwise become a traffic hazard.



TURN SIGNAL LIGHT SWITCH ⑤

Moving the switch to the “←” position will flash the left turn signals. Moving the switch to the “→” position will flash the right turn signals. The indicator light will also flash intermittently. To cancel turn signal operation, push the switch in.

⚠ WARNING

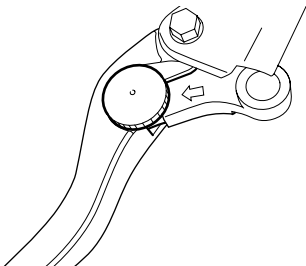
Failure to use the turn signals, and failure to turn off the turn signals can be hazardous. Other drivers may misjudge your course and this may result in an accident.

Always use the turn signals when you intend to change lanes or make a turn. Be sure to turn off the turn signals after completing the turn or lane change.

HORN SWITCH “🔊” ⑥

Press the switch to sound the horn.

Clutch Lever Adjustment



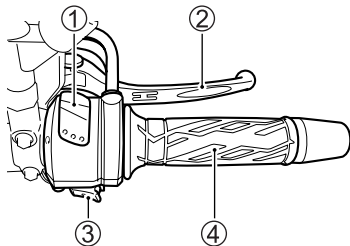
The distance between the grip and the clutch lever is adjustable to 4 positions. To change the position, push the clutch lever forward and turn the adjuster to the desired position. When changing the clutch lever position, always be sure the adjuster stops in the proper position; a projection of the clutch lever holder should fit into the depression of the adjuster. This motorcycle is delivered from the factory with its adjuster set on position 2.

WARNING

Adjusting the clutch lever position while riding can be hazardous. Removing a hand from the handlebars can reduce your ability to control the motorcycle.

Always keep both hands on the handlebars while riding.

RIGHT HANDLEBAR



ENGINE STOP SWITCH ①

“” position

The ignition circuit is off. The engine cannot start or run.

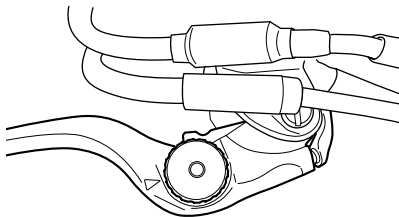
“” position

The ignition circuit is on and the engine can run.

FRONT BRAKE LEVER ②

The front brake is applied by squeezing the brake lever gently toward the throttle grip. This motorcycle is equipped with a disk brake system and excessive pressure is not required to slow the machine down properly. The brake light will be lit when the lever is squeezed inward.

Front Brake Lever Adjustment

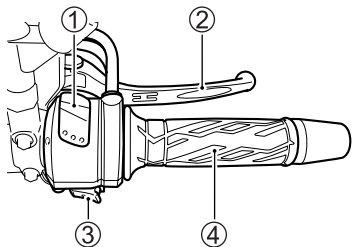


The distance between the throttle grip and the front brake lever is adjustable to 6 positions. To change the position, push the brake lever forward and turn the adjuster to the desired position. When changing the brake lever position, always be sure the adjuster stops in the proper position; a projection of the brake lever holder should fit into the depression of the adjuster. This motorcycle is delivered from the factory with its adjuster set on position 3.


WARNING

Adjusting the front brake lever position while riding can be hazardous. Removing a hand from the handlebars can reduce your ability to control the motorcycle.

Always keep both hands on the handlebars while riding.



ELECTRIC STARTER BUTTON “” ③

This button is used for operating the starter motor. With the ignition switch in the “ON” position, the engine stop switch in “” and the transmission in neutral, push the electric starter button to operate the starter motor and start the engine.

NOTE: This motorcycle is equipped with interlock switches for the ignition circuit and the starter circuit. The engine can only be started if:

- *The transmission is in neutral and the clutch is disengaged, or*
- *The transmission is in gear, the side stand is fully up and the clutch is disengaged.*

NOTE: The headlight will go off when the electric starter button is pushed.

CAUTION

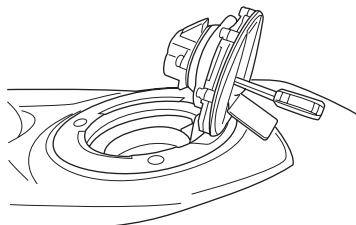
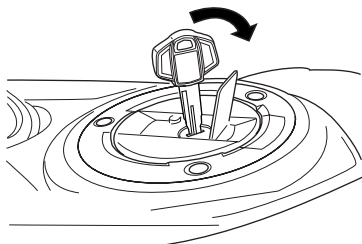
To prevent electrical system damage, do not operate the starter motor more than 5 seconds at a time.

If the engine does not start after several attempts, check the fuel supply and ignition system. Refer to the TROUBLE-SHOOTING section in this manual.

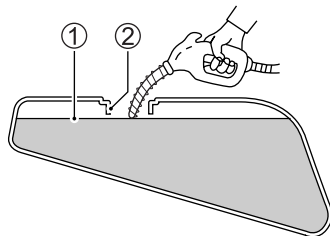
THROTTLE GRIP ④

Engine speed is controlled by the position of the throttle grip. Twist it toward you to increase engine speed. Turn it away from you to decrease engine speed.

FUEL TANK CAP



To open the fuel tank cap, insert the ignition key into the lock and turn it clockwise. With the key inserted, lift up with the key and open the fuel tank cap. To close the fuel tank cap, push the cap down firmly with the key in the cap lock.



- ① Fuel level
- ② Filler neck

WARNING

Overfilling the fuel tank can cause the fuel to overflow when it expands due to heat from the engine or the sun. Spilled fuel can catch on fire.

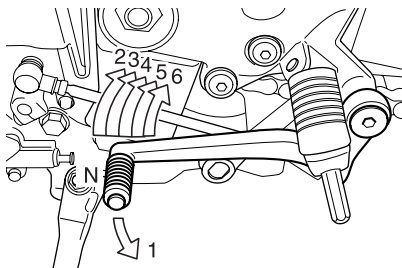
Never fill the fuel above the bottom of the filler neck.

WARNING

Fuel and fuel vapor are highly flammable and toxic. You can be burned or poisoned when refueling.

- Stop the engine and keep flames, sparks and heat sources away.
- Refuel only outdoors or in a well ventilated area.
- Do not smoke.
- Wipe up spills immediately.
- Avoid breathing fuel vapor.
- Keep children and pets away.

GEARSHIFT LEVER

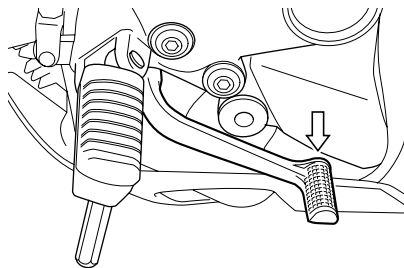


This motorcycle has a 6-speed transmission which operates as shown. To shift properly, pull the clutch lever and close the throttle at the same time you operate the gearshift lever. Lift the gearshift lever to upshift and depress the lever to downshift. Neutral is located between 1st and 2nd gear. When neutral is desired, depress or lift the lever halfway between 1st and 2nd gear.

NOTE: When the transmission is in neutral, the green indicator light on the instrument panel will be lit. However, even though the light is illuminated, cautiously and slowly release the clutch lever to make sure that the transmission is positively in neutral.

Reduce the motorcycle speed before downshifting. When downshifting, the engine speed should be increased before the clutch is engaged. This will prevent unnecessary wear on the drive train components and the rear tire.

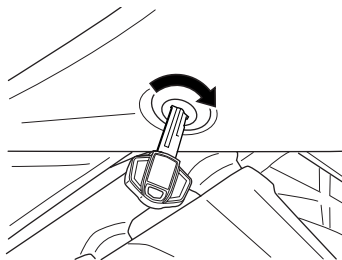
REAR BRAKE PEDAL



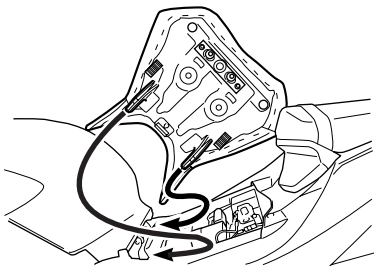
Depressing the rear brake pedal will apply the rear disk brake. The brake light will be illuminated when the rear brake is operated.

SEAT LOCK AND HELMET HOLDER

Front Seat



To remove the front seat, insert the ignition key into the lock and turn it clockwise. Raise the rear end of the seat and slide it backward.



To reinstall the seat, slide the seat hooks into the seat hook retainers and push down firmly until the seat snaps into locked position.

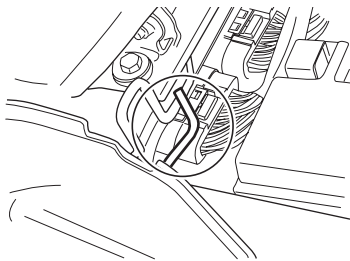
WARNING

Failure to install the seat properly could allow the seat to move and cause loss of rider control.

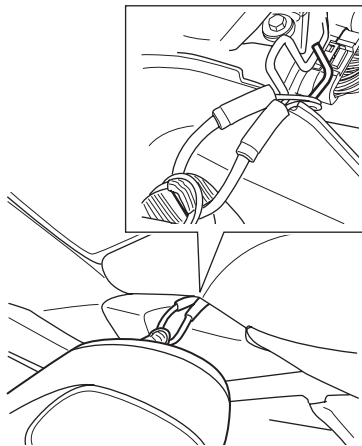
Fasten the seat securely in its proper position.

Helmet Holder

This motorcycle has helmet holder under the front seat.



Hook your helmet to the helmet holder and lock the seat.



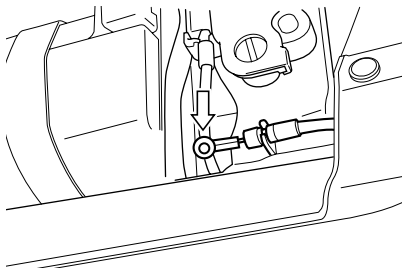
Use helmet holder wire as shown to hook passenger's helmet.

⚠ WARNING

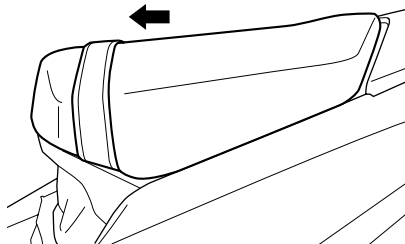
Riding with a helmet fastened to the helmet holder can interfere with rider control.

Never carry a helmet fastened to the helmet holder. Fix the helmet securely atop the seat if you must carry it.

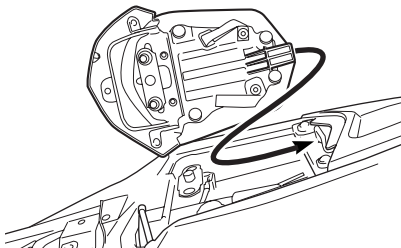
Rear Seat



The seat lock is located under the front seat. To remove the rear seat, pull the seat lock wire.



Raise the front end of the seat and slide it forward.



To reinstall the seat, slide the seat hooks into the seat hook retainers and push down firmly until the seat snaps into the locked position.

⚠ WARNING

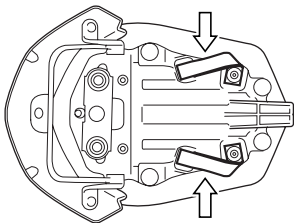
Failure to install the seat properly could allow the seat to move and cause loss of rider control.

Latch the seat securely in its proper position.

Seat Tail Cover

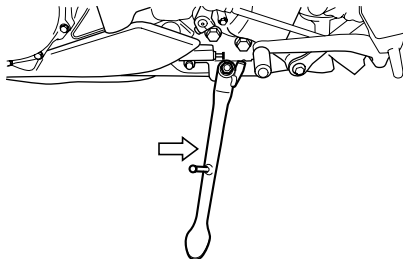
A seat tail cover for solo riding can be attached by using the same procedure as for installing the rear seat.

LUGGAGE STRAPS



The luggage straps are folded under the rear seat. Remove the straps from the hooks and reinstall the rear seat with the straps out. Hook bands to the straps to fix luggage on the rear seat.

SIDE STAND



An interlock switch is provided to cut off the ignition circuit when the side stand is down and the transmission is in any gear other than neutral.

The side stand/ignition interlock switch works as follows:

- If the side stand is down and the transmission is in gear, the engine can not be started.
- If the engine is running and the transmission is shifted into gear with the side stand down, the engine will stop running.
- If the engine is running and the side stand is put down with the transmission in gear, the engine will stop running.

WARNING

Riding with the side stand incompletely retracted can result in an accident when you turn left.

- **Check operation of the side stand/ignition interlock system before riding.**
- **Always retract the side stand completely before starting off.**

CAUTION

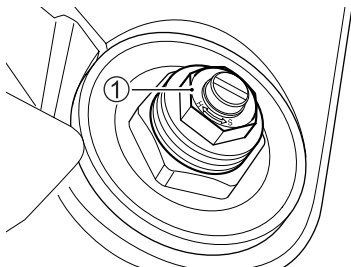
Park the motorcycle on firm, level ground to help prevent it from falling over.

If you must park on an incline, aim the front of the motorcycle uphill and put the transmission into 1st gear to reduce the possibility of rolling off the side stand.

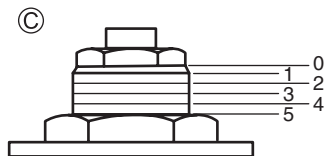
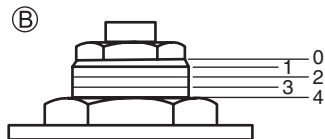
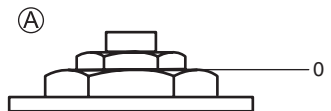
SUSPENSION ADJUSTMENT

The standard settings of both front and rear suspensions are selected to meet various riding conditions such as low to high motorcycle speed and light to heavy load on the motorcycle. The suspension settings can be adjusted for your preference and fine-tuning.

FRONT SUSPENSION Spring Pre-load Adjustment



To change the spring pre-load, turn the adjuster ① clockwise or counterclockwise. Turning the adjuster clockwise will increase the spring pre-load. Turning the adjuster counterclockwise will decrease the spring pre-load. There are 5 grooved lines on the side of the adjuster ① for reference. Position 5 provides the minimum spring pre-load and position 0 provides the maximum pre-load. This motorcycle is delivered from the factory with its adjuster set on position 4.



① Position 0

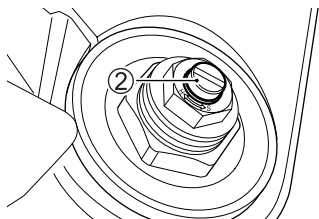
① Position 4

① Position 5

Damping Force Adjustment

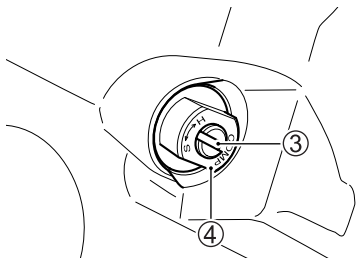
The rebound and compression damping force can be individually adjusted by turning the respective adjusters. The rebound damping force adjuster ② is located at the top of the front suspension. The compression damping force adjuster ③ is located at the bottom of the front suspension.

To adjust the damping force, set the adjuster to the standard setting first and then adjust the adjuster to the desired position.



To set the rebound damping force adjuster to the standard position, turn the adjuster clockwise until it stops and then turn it counterclockwise 9 clicks.

Turn the adjuster clockwise from the standard position to stiffen the damping force. Turn the adjuster counterclockwise to soften the damping force. The damping force should be adjusted gradually, 1 click at a time, to fine-tune the suspension.



To set the compression damping force adjuster to the standard position, turn the adjuster clockwise until it stops and then turn it counterclockwise 8 clicks.

Turn the adjuster clockwise from the standard position to stiffen the damping force. Turn the adjuster counterclockwise to soften the damping force. The damping force should be adjusted gradually, 1 click at a time, to fine-tune the suspension.

NOTE: Do not loosen the adjuster base ④, or front fork oil will ooze through the adjuster base.

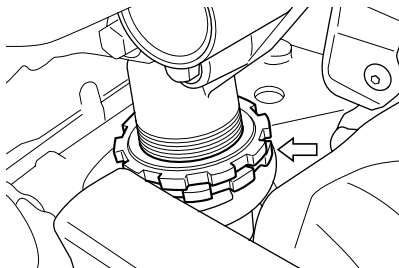
WARNING

Unequal suspension adjustment can cause poor handling and loss of stability.

Adjust the right and left front forks to the same settings.

REAR SUSPENSION

Spring Pre-load Adjustment

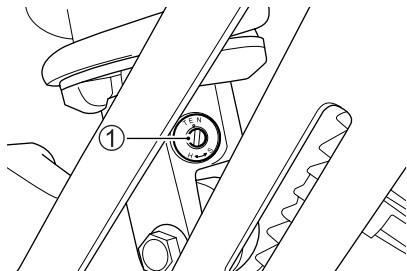


The adjustment can be performed by changing the adjuster ring position. However, Suzuki recommends that this adjustment be done by your authorized Suzuki dealer, since a special tool is needed for this job.

Damping Force Adjustment

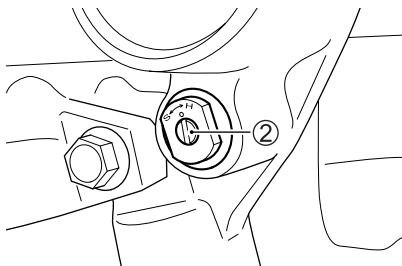
The rebound and compression damping force can be individually adjusted by turning the respective adjusters. The rebound damping force adjuster ① is located at the bottom of the rear suspension. The compression damping force adjuster ② is located at the left side of the rear suspension.

To adjust the damping force, set the adjuster to the standard setting first and then adjust the adjuster to the desired position.



To set the rebound damping force adjuster to the standard position, turn the adjuster clockwise until it stops and then turn it counterclockwise 2 turns until the two punch marks align. If the two punch marks do not align by turning out 2 turns, turn in or out the adjuster until two punch marks align.

Turn the adjuster clockwise from the standard position to stiffen the damping force. Turn the adjuster counterclockwise to soften the damping force. The damping force should be adjusted gradually, 1/8 turn at a time, to fine-tune the suspension.



To set the compression damping force adjuster to the standard position, turn the adjuster clockwise until it stops and then turn it counterclockwise 2 turns until the two punch marks align. If the two punch marks do not align by turning out 2 turns, turn in or out the adjuster until two punch marks align.

Turn the adjuster clockwise from the standard position to stiffen the damping force. Turn the adjuster counterclockwise to soften the damping force. The damping force should be adjusted gradually, 1/8 turn at a time, to fine-tune the suspension.

FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS

FUEL	3-2
ENGINE OIL	3-4
COOLANT	3-6

FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS

FUEL

Use premium unleaded gasoline with an octane rating of 95 or higher (Research method). Unleaded gasoline can extend spark plug life and exhaust components life.

(For Canada)

Your motorcycle requires premium unleaded gasoline whenever possible, with a minimum pump octane rating of 90 ((R+M)/2 method). In some areas, the only fuels that are available are oxygenated fuels.

Oxygenated fuels which meet the minimum octane requirement and the requirements described below may be used in your motorcycle without jeopardizing the New Vehicle Limited Warranty or the Emission Control System Warranty.

NOTE: The GSX1300BK engine is designed to use premium unleaded gasoline only. Use premium unleaded gasoline under all riding conditions.

NOTE: Oxygenated fuels are fuels which contain oxygen-carrying additives such as MTBE or alcohol.

Gasoline containing MTBE

Unleaded gasoline containing MTBE (Methyl Tertiary Butyl Ether) may be used in your motorcycle if the MTBE content is not greater than 15%. This oxygenated fuel does not contain alcohol.

Gasoline/Ethanol Blends

Blends of unleaded gasoline and ethanol (grain alcohol), also known as "GASOHOL", may be used in your motorcycle if the ethanol content is not greater than 10%.

Gasoline/Methanol Blends

Fuels containing 5% or less methanol (wood alcohol) may be suitable for use in your motorcycle if they contain co-solvents and corrosion inhibitors.

DO NOT USE fuels containing more than 5% methanol under any circumstances. Fuel system damage or motorcycle performance problems resulting from the use of such fuels are not the responsibility of Suzuki and may not be covered under the New Vehicle Limited Warranty or the Emission Control System Warranty.

NOTE:

- *To help minimize air pollution, Suzuki recommends that you use oxygenated fuels.*
- *Be sure that any oxygenated fuel you use has octane ratings of at least 90 pump octane ((R+M)/2 method).*
- *If you are not satisfied with the drivability of your motorcycle when you are using an oxygenated fuel, or if engine pinging is experienced, substitute another brand as there are differences between brands.*

CAUTION

Spilled gasoline containing alcohol can harm your motorcycle. Alcohol can damage painted surfaces.

Be careful not to spill any fuel when filling the fuel tank. Wipe spilled gasoline up immediately.

ENGINE OIL

Oil quality is a major contributor to your engine's performance and life. Always select good quality engine oil. Use oil with an API (American Petroleum Institute) classification of SF/SG or SH/SJ, or with a JASO classification of MA.

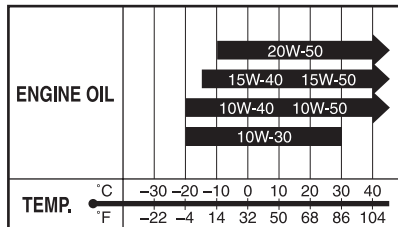
SAE	API	JASO
10W-40	SF or SG	—
10W-40	SH or SJ	MA

API: American Petroleum Institute

JASO: Japanese Automobile Standards Organization

SAE Engine Oil Viscosity

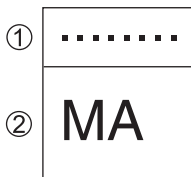
Suzuki recommends the use of SAE 10W-40 engine oil. If SAE 10W-40 engine oil is not available, select an alternative according to the following chart.



JASO T903

The JASO T903 standard is an index to select engine oils for 4-stroke motorcycle and ATV engines. Motorcycle and ATV engines lubricate clutch and transmission gears with engine oil. JASO T903 specifies performance requirements for motorcycle and ATV clutches and transmissions.

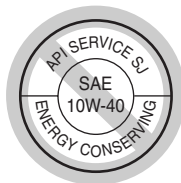
There are two classes, MA and MB. The oil container shows the classification as follows.



- ① Code number of oil sales company
- ② Oil classification

Energy Conserving

Suzuki does not recommend the use of “ENERGY CONSERVING” oils. Some engine oils which have an API classification of SH or higher have an “ENERGY CONSERVING” indication in the API classification doughnut mark. These oils can affect engine life and clutch performance.



Not recommended



Recommended

COOLANT

Use an anti-freeze compatible with aluminum radiator mixed with distilled water only at the ratio of 50:50.

WARNING

Engine coolant is harmful or fatal if swallowed or inhaled.

Do not drink antifreeze or coolant solution. If swallowed, do not induce vomiting. Immediately contact a poison control center or a physician. Avoid inhaling mist or hot vapors; if inhaled, remove to fresh air. If coolant gets in eyes, flush eyes with water and seek medical attention. Wash thoroughly after handling. Solution can be poisonous to animals. Keep out of the reach of children and animals.

CAUTION

Spilled engine coolant can damage painted surfaces.

Do not spill any fluid when filling the radiator. Wipe spilled engine coolant up immediately.

Water for mixing

Use distilled water only. Water other than distilled water can corrode and clog the aluminium radiator.

Anti-freeze

The coolant performs as rust inhibitor and water pump lubricant as well as anti-freeze. Therefore the coolant should be used at all times even though the atmospheric temperature in your area does not go down to freezing point.

Required amount of water/coolant

Solution capacity (total): 2900 ml
(3.1/2.6 US/lmp. qt)

50%	Water	1450 ml (1.5/1.3 US/lmp. qt)
	Coolant	1450 ml (1.5/1.3 US/lmp. qt)

NOTE: This 50% mixture will protect the cooling system from freezing at temperatures above -31°C . If the motorcycle is to be exposed to temperature below -31°C , this mixing ratio should be increased up to 55% (-40°C) or 60% (-55°C). The mixing ratio should not exceed 60%.



BREAK-IN (RUNNING-IN) AND INSPECTION BEFORE RIDING

MAXIMUM ENGINE SPEED RECOMMENDATION	4-2
VARY THE ENGINE SPEED	4-2
BREAKING IN THE NEW TIRES	4-3
AVOID CONSTANT LOW SPEED	4-3
ALLOW THE ENGINE OIL TO CIRCULATE BEFORE RIDING	4-4
OBSERVE YOUR FIRST AND MOST CRITICAL SERVICE	4-4
INSPECTION BEFORE RIDING	4-5

BREAK-IN (RUNNING-IN) AND INSPECTION BEFORE RIDING

Previous sections explain how important proper break-in is to achieving maximum life and performance from your new Suzuki. The following guidelines explain proper break-in procedures.

MAXIMUM ENGINE SPEED RECOMMENDATION

This table shows the maximum recommended engine speed during the break-in period.

Initial	800 km (500 miles)	Below 5000 rpm
Up to	1600 km (1000 miles)	Below 7500 rpm
Over	1600 km (1000 miles)	Below 10500 rpm

VARY THE ENGINE SPEED

The engine speed should be varied and not held at a constant speed. This allows the parts to be “loaded” with pressure, and then unloaded, allowing the parts to cool. This aids the mating process of the parts. It is essential that some stress be placed on the engine components during break-in to ensure this mating process. Do not, though, apply excessive load on the engine.

BREAKING IN THE NEW TIRES

New tires need proper break-in to assure maximum performance, just as the engine does. Wear in the tread surface by gradually increasing your cornering lean angles over the first 160 km (100 miles) before attempting maximum performance. Avoid hard acceleration, hard cornering, and hard braking for the first 160 km (100 miles).

WARNING

Failure to perform break-in of the tires could cause tire slip and loss of control.

Use extra care when riding on new tires. Perform proper break-in of the tires as described in this section and avoid hard acceleration, hard cornering, and hard braking for the first 160 km (100 miles).

AVOID CONSTANT LOW SPEED

Operating the engine at constant low speed (light load) can cause parts to glaze and not seat in. Allow the engine to accelerate freely through the gears, without exceeding the recommended maximum limits. Do not, however, use full throttle for the first 1600 km (1000 miles).

ALLOW THE ENGINE OIL TO CIRCULATE BEFORE RIDING

Allow sufficient idling time after warm or cold engine start up before applying load or revving the engine. This allows time for the lubricating oil to reach all critical engine components.

OBSERVE YOUR FIRST AND MOST CRITICAL SERVICE

The initial service (1000 km maintenance) is the most important service your motorcycle will receive. During break-in operation, all of the engine components will have mated together and seated. Maintenance required as part of the initial service includes correction of all adjustments, tightening of all fasteners and replacement of dirty oil. Timely performance of this service will help make sure you get the best service life and performance from the engine.

NOTE: The 1000 km (600 miles) service should be performed as outlined in the INSPECTION AND MAINTENANCE section of this Owner's Manual. Pay particular attention to the CAUTION and WARNING in that section.

INSPECTION BEFORE RIDING

WARNING

Failure to inspect and maintain your motorcycle properly increases the chance of an accident or equipment damage.

Always perform a pre-ride inspection before each ride. Refer to the table on page 4-6 for check items. For further details, refer to the **INSPECTION AND MAINTENANCE** section.

WARNING

Using worn, improperly inflated, or incorrect tires will reduce stability and can cause an accident.

Follow all instructions in the **TIRES** section in this owner's manual.

Before riding the motorcycle, be sure to check the following items. Never underestimate the importance of these checks. Perform all of them before riding the motorcycle.

WARNING

Checking maintenance items when the engine is running can be hazardous. You could be severely injured if your hands or clothing get caught in moving parts.

Shut the engine off when performing maintenance checks, except when checking the engine stop switch and throttle.

WHAT TO CHECK	CHECK FOR:
Steering	<ul style="list-style-type: none">• Smoothness• No restriction of movement• No play or looseness
Throttle	<ul style="list-style-type: none">• Correct play in the throttle cable• Smooth operation and positive return of the throttle grip to the closed position
Clutch	<ul style="list-style-type: none">• Fluid level in the reservoir to be above "LOWER" line• Correct lever play• No fluid leakage• Smooth and progressive action
Brakes	<ul style="list-style-type: none">• Fluid level in the reservoir to be above "LOWER" line• Correct pedal and lever play• No "sponginess"• No fluid leakage• Brake pads not to be worn down to the limit line
Suspension	Smooth movement
Fuel	Enough fuel for the planned distance of operation

Drive chain	<ul style="list-style-type: none"> • Correct tension or slack • Adequate lubrication • No excessive wear or damage
Tires	<ul style="list-style-type: none"> • Correct pressure • Adequate tread depth • No cracks or cuts
Engine oil	Correct level
Cooling system	<ul style="list-style-type: none"> • Proper coolant level • No coolant leakage
Lighting	Operation of all lights and indicators
Horn	Correct function
Engine stop switch	Correct function
Side stand/ Ignition interlock switch	Proper operation






RIDING TIPS

STARTING THE ENGINE	5-2
STARTING OFF	5-4
USING THE TRANSMISSION	5-6
RIDING ON HILLS	5-8
STOPPING AND PARKING	5-8
CARRYING A PASSENGER	5-11

RIDING TIPS

STARTING THE ENGINE

Before attempting to start the engine, make sure:

- The transmission is in neutral.
- The engine stop switch is in the “” position.

NOTE: This motorcycle is equipped with interlock switches for the ignition circuit and the starter circuit.

The engine can only be started if:

- *The transmission is in neutral and the clutch is disengaged, or*
- *The transmission is in gear, the side stand is fully up and the clutch is disengaged.*

When the Engine is Cold:

1. Close the throttle completely and push the electric starter button.
2. After the engine starts, let the engine run until the engine sufficiently warms up.

When a Cold Engine is Hard to Start:

1. Open the throttle approximately 1/8 turn and push the electric starter button.
2. After the engine starts, let the engine run until the engine sufficiently warms up.

When the Engine is Warm:

Close the throttle completely and push the electric starter button.

When a Warm Engine is Hard to Start:

Open the throttle approximately 1/8 turn and push the electric starter button.

WARNING

Running the engine indoors or in a garage can be hazardous. Exhaust gas contains carbon monoxide, a gas that is colorless and odorless and can cause death or severe injury.

Only run the engine outdoors where there is fresh air.

CAUTION

Running the engine too long without riding may cause the engine to overheat. Overheating can result in damage to internal engine components and discoloration of exhaust pipes.

Shut the engine off if you cannot begin your ride promptly.

STARTING OFF

WARNING

Riding this motorcycle at excessive speed increases your chances of losing control of the motorcycle. This may result in an accident.

Always ride within the limits of your skills, your motorcycle, and the riding conditions.

WARNING

Removing your hands from the handlebars or feet from the footrests during operation can be hazardous. If you remove even one hand or foot from the motorcycle, you can reduce your ability to control the motorcycle.

Always keep both hands on the handlebars and both feet on the footrests of your motorcycle during operation.

WARNING

Sudden side winds, which can occur when being passed by larger vehicles, at tunnel exits or in hilly areas, can upset your control.

Reduce your speed and be alert to side winds.

After moving the side stand to the fully up position, squeeze the clutch lever and pause momentarily. Engage first gear by depressing the gear shift lever downward. Twist the throttle grip toward you and at the same time release the clutch lever gently and smoothly. As the clutch engages, the motorcycle will start moving forward. To shift to the next higher gear, accelerate gently, then close the throttle and squeeze the clutch lever simultaneously. Lift the gear shift lever upward to select the next gear, release the clutch lever and open the throttle again. Select higher gears in this manner until top gear is reached.

NOTE: This motorcycle is equipped with a side stand/ignition interlock switch. If you shift the transmission into gear when the side stand is down, the engine will stop running.

USING THE TRANSMISSION

The transmission is provided to keep the engine operating smoothly in its normal operating speed range. The gear ratios have been carefully chosen to meet the characteristics of the engine. The rider should always select the most suitable gear for the prevailing conditions. Never slip the clutch to control road speed, but rather downshift to allow the engine to run within its normal operational range.

(For Canada)

The table below shows the approximate speed range for each gear.

Shifting up schedule

Gear position	km/h	miles/h
1st → 2nd	20	12
2nd → 3rd	30	19
3rd → 4th	40	25
4th → 5th	50	31
5th → 6th	60	37

Shifting down schedule

Gear position	km/h	miles/h
6th → 5th	50	31
5th → 4rd	40	25
4th → 3rd	30	19

Disengage the clutch when the motorcycle speed drops below 23 km/h (14 miles/h).

WARNING

Downshifting when engine speed is too high can:

- cause the rear wheel to skid and lose traction due to increased engine braking, resulting in an accident; or
- force the engine to overrev in the lower gear, resulting in engine damage.

Reduce speed before downshifting.

WARNING

Downshifting while the motorcycle is leaned over in a corner may cause rear wheel skid and loss of control.

Reduce your speed and downshift before entering a corner.

CAUTION

Revving the engine into the red zone can cause severe engine damage.

Never allow the engine to rev into the red zone in any gear.

RIDING ON HILLS

- When climbing steep hills, the motorcycle may begin to slow down and show lack of power. At this point you should shift to a lower gear so that the engine will again be operating in its normal power range. Shift rapidly to prevent the motorcycle from losing momentum.
- When descending a long, steep slope, use engine compression to assist the brakes by shifting to a lower gear. Continuous brake application can overheat the brakes and reduce their effectiveness.
- Be careful, however, not to allow the engine to over rev.

STOPPING AND PARKING

1. Twist the throttle grip away from yourself to close the throttle completely.
2. Apply the front and rear brakes evenly and at the same time.
3. Downshift through the gears as road speed decreases.
4. Select neutral with the clutch lever squeezed toward the grip (disengaged position) just before the motorcycle stops. Neutral position can be confirmed by observing the neutral indicator light.

WARNING

Inexperienced riders tend to underutilize the front brake. This can cause excessive stopping distance and lead to a collision. Using only the front or rear brake can cause skidding and loss of control.

Apply both brakes evenly and at the same time.

WARNING

Hard braking while turning may cause wheel skid and loss of control.

Brake before you begin to turn.

WARNING

Hard braking on wet, loose, rough, or other slippery surfaces can cause wheel skid and loss of control.

Brake lightly and with care on slippery or irregular surfaces.

WARNING

Following another vehicle too closely can lead to a collision. As vehicle speeds increase, stopping distance increases progressively.

Be sure you have a safe stopping distance between you and the vehicle in front of you.

5. Park the motorcycle on a firm, flat surface where it will not fall over.

WARNING

A hot muffler can burn you. The muffler will be hot enough to burn you for some time after stopping the engine.

Park the motorcycle where pedestrians or children are not likely to touch the muffler.

NOTE: If the motorcycle is to be parked on the side stand on a slight slope, the front end of the motorcycle should face “up” the incline to avoid rolling forward off the side stand. You may leave the motorcycle in 1st gear to help prevent it from rolling off the side stand. Shift to neutral before starting engine.

6. Turn the ignition key to the “OFF” position.
7. Turn the handlebars all the way to the left and lock the steering for security.
8. Remove the ignition key.

NOTE: If an optional anti-theft lock such as U-shape lock, brake disk lock and chain is used to avoid theft, be sure to remove anti-theft lock before moving the motorcycle.

CARRYING A PASSENGER

Before you invite someone to be a passenger on your motorcycle, you need to be thoroughly familiar with motorcycle operation. Adjust tire pressures and suspension according to the Tire Pressure and Loading section and the Suspension section of this manual.

The passenger should always hold onto your waist or hips, or seat strap. Ask your passenger not to make any sudden movements. When you lean going around a corner, the passenger should lean with you. The passenger should always keep his or her feet on the footrests, even when you are stopped at a light.

To help prevent burn injuries, warn your passenger not to contact the muffler when mounting or dismounting your motorcycle.

WARNING

The seat tail cover can be hot enough to burn you and your passenger. The hot muffler is under the seat tail cover.

The passenger should hold onto your waist or hips, or seat strap. Do not hold seat tail cover.



INSPECTION AND MAINTENANCE

MAINTENANCE SCHEDULE	6-2
TOOLS	6-6
STEERING DAMPER MAINTENANCE	6-7
LUBRICATION POINTS	6-8
BATTERY	6-9
AIR CLEANER	6-11
SPARK PLUGS	6-21
FUEL HOSE	6-25
ENGINE OIL	6-26
ENGINE IDLE SPEED INSPECTION	6-34
THROTTLE CABLE PLAY	6-34
CLUTCH	6-35
COOLANT	6-37
DRIVE CHAIN	6-39
BRAKES	6-45
TIRES	6-51
SIDE STAND/IGNITION INTERLOCK SWITCH	6-56
FRONT WHEEL REMOVAL	6-57
REAR WHEEL REMOVAL	6-62
LIGHT BULB REPLACEMENT	6-66
FUSES	6-76

INSPECTION AND MAINTENANCE

MAINTENANCE SCHEDULE

The chart indicates the intervals between periodic services in miles, kilometers and months. At the end of each interval, be sure to inspect, check, lubricate and service as instructed. If your motorcycle is used under high stress conditions such as continuous full throttle operation, or is operated in a dusty climate, certain services should be performed more often to ensure reliability of the machine as explained in the maintenance section. Your Suzuki dealer can provide you with further guidelines. Steering components, suspensions and wheel components are key items and require very special and careful servicing. For maximum safety we suggest that you have these items inspected and serviced by your authorized Suzuki dealer or a qualified service mechanic.

WARNING

Improper maintenance or failure to perform recommended maintenance increases the chance of an accident or motorcycle damage.

Always follow the inspection and maintenance recommendations and schedules in this owner's manual. Ask your SUZUKI dealer or a qualified mechanic to do the maintenance items marked with an asterisk (*). You may perform the unmarked maintenance items by referring to the instructions in this section, if you have mechanical experience. If you are not sure how to do any of the jobs, have your SUZUKI dealer or a qualified mechanic do them.

WARNING

Running the engine indoors or in a garage can be hazardous. Exhaust gas contains carbon monoxide, a gas that is colorless and odorless and can cause death or severe injury.

Only run the engine outdoors where there is fresh air.

NOTE: The MAINTENANCE CHART specified the minimum requirements for maintenance. If you use your motorcycle under severe conditions, perform maintenance more often than shown in the chart. If you have any questions regarding maintenance intervals, consult your SUZUKI dealer or a qualified mechanic.

CAUTION

Using poor quality replacement parts can cause your motorcycle to wear more quickly and may shorten its useful life.

Use only genuine Suzuki replacement parts or their equivalent.

MAINTENANCE CHART

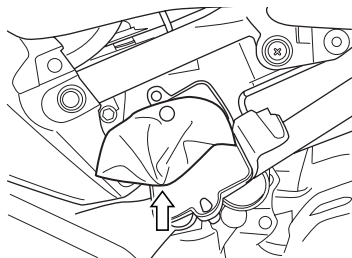
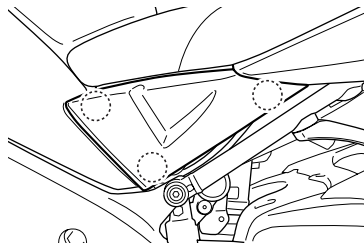
Interval: This interval should be judged by odometer reading or number of months, whichever comes first.

Interval Element	km	1000	6000	12000	18000	24000
	miles	600	4000	7500	11000	14500
	months	2	12	24	36	48
Air cleaner element		–	I	I	R	I
* Exhaust pipe bolts and muffler bolts		T	–	T	–	T
* Exhaust control valve		I	–	I	–	I
* Valve clearance		–	–	–	–	I
Spark plugs		–	I	R	I	R
Fuel hose		–	I	I	I	I
Engine oil		R	R	R	R	R
Engine oil filter		R	–	–	R	–
Throttle cable play		I	I	I	I	I
* Throttle valve synchronization		–	–	I	–	I
* PAIR (air supply) system		–	–	I	–	I
* Engine coolant		Replace every 2 years				
Radiator hose		–	I	I	I	I
Clutch fluid		–	I	I	I	I
		Replace every 2 years				

Element \ Interval	km	1000	6000	12000	18000	24000
	miles	600	4000	7500	11000	14500
	months	2	12	24	36	48
Clutch hose	–	I	I	I	I	I
	Replace every 4 years					
Drive chain	I	I	I	I	I	I
	Clean and lubricate every 1000 km (600 miles)					
* Brakes	I	I	I	I	I	I
Brake fluid	–	I	I	I	I	I
	*Replace every 2 years					
Brake hose	–	I	I	I	I	I
	*Replace every 4 years					
Tires	–	I	I	I	I	I
* Steering	I	–	I	–	–	I
* Front forks	–	–	I	–	–	I
* Rear suspension	–	–	I	–	–	I
* Chassis bolts and nuts	T	T	T	T	T	T

NOTE: I= Inspect and clean, adjust, replace or lubricate as necessary,
R= Replace, T= Tighten

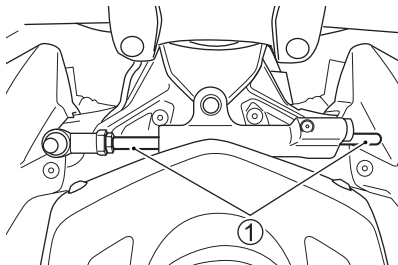
TOOLS



A tool kit is supplied and located inside the left frame cover.

STEERING DAMPER MAINTENANCE

1. Keep the steering damper shaft ① clean at all times.
2. Wipe off any oil residue with a cloth.



NOTE:

- Do not confuse the grease-like residue on the steering damper's shaft with an oil leak. Collection of this residue is normal and is from oil seal lubricant used in the damper.
- You may also notice a sound as the damper shaft is stroked in and out. This "escaping air" type sound is normal and is made as the internal valving damps the shaft movement.

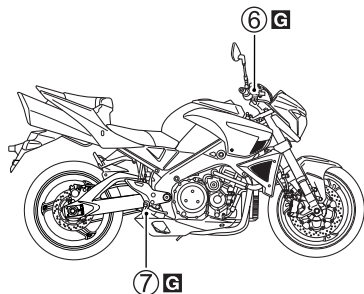
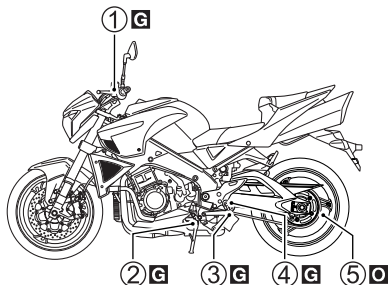
LUBRICATION POINTS

Proper lubrication is important for smooth operation and long life of each working part of your motorcycle and also for safe riding. It is a good practice to lubricate the motorcycle after a long rough ride and after getting it wet in the rain or after washing it. Major lubrication points are indicated below.

CAUTION

Lubricating switches can damage the switches.

Do not apply grease and oil to the switches.



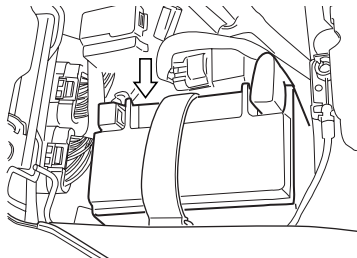
- O** Motor oil
G Grease

- ① Clutch lever holder
② Side stand pivot and spring hook
③ Gearshift lever pivot
④ Left footrest pivot
⑤ Drive chain
⑥ Brake lever holder
⑦ Brake pedal pivot and right footrest pivot

BATTERY

The battery is located under the front seat. Remove the front seat by referring to the SEAT LOCK AND HELMET HOLDER section. This battery is a sealed type battery and requires no maintenance. Have your dealer check the battery's state of charge periodically.

The standard charging rate is $1.2A \times 5$ to 10 hours and the maximum rate is $5.0A \times 1$ hour. Never exceed maximum charging rate.



WARNING

Hydrogen gas produced by batteries can explode if exposed to flames or sparks.

Keep flames and sparks away from the battery. Never smoke when working near the battery.

CAUTION

Exceeding the maximum charging rate for the battery can shorten its life.

Never exceed the maximum charging rate.

CAUTION

Reversing the battery lead wires can damage the charging system and the battery.

The red lead must go to the positive (+) terminal and the black (or black with white tracer) lead must go to the negative (-) terminal.

AIR CLEANER

The air cleaner is located under the fuel tank. If the element has become clogged with dust, intake resistance will increase with a resultant decrease in power output and an increase in fuel consumption. If driving under dusty conditions, the air cleaner element must be cleaned or replaced more frequently than maintenance schedule. Check and clean the air cleaner element periodically according to the following procedure.

WARNING

Operating the engine without the air cleaner element in place could allow a flame to spit back from the engine to the air cleaner, or could allow dirt to enter the engine. This could cause a fire or severe engine damage.

Never run the engine without the air cleaner element properly installed.

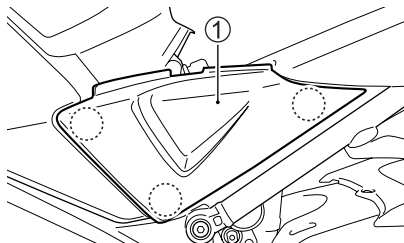
CAUTION

Clean or replace the air cleaner element frequently if the motorcycle is used in dusty, wet or muddy conditions. The air cleaner element will clog under these conditions, and this may cause engine damage, poor performance, and poor fuel economy.

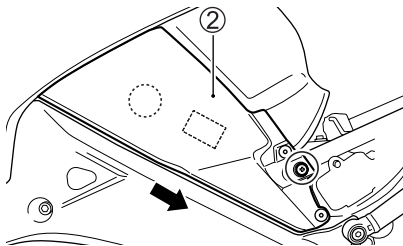
Clean the air cleaner case and element immediately if water gets in the air cleaner box.

REMOVAL

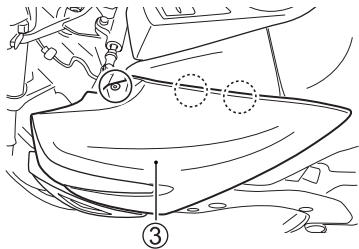
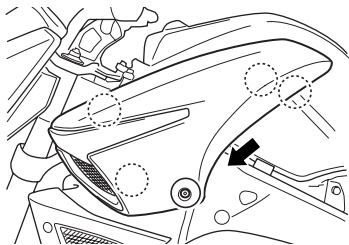
1. Place the motorcycle on the side stand.
2. Remove the front seat by referring to the SEAT LOCK AND HELMET HOLDER section.



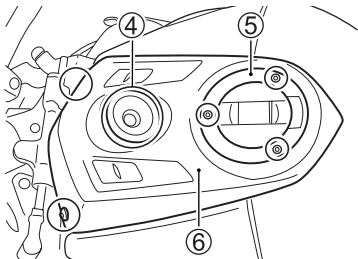
3. Remove the right and left side frame covers, ① by unhooking the side frame covers.



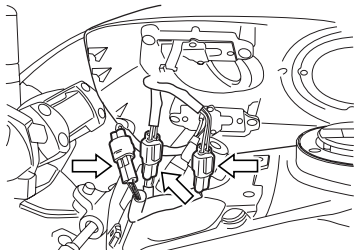
4. Remove the screws and fasteners. Remove the right and left side frame covers, ② by unhooking the side frame covers.



5. Remove the bolts and fasteners. Remove the right and left fuel tank cover ③ by unhooking the fuel tank covers.

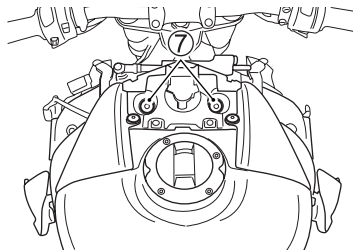
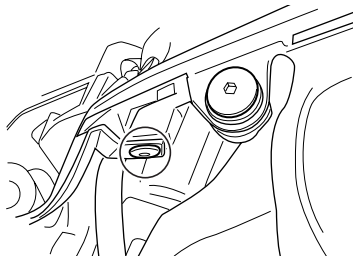


6. Turn the ignition cover ④ clockwise and remove it.
7. Remove the bolts. Remove the fuel tank cap cover ⑤ with fuel tank upper cover ⑥.



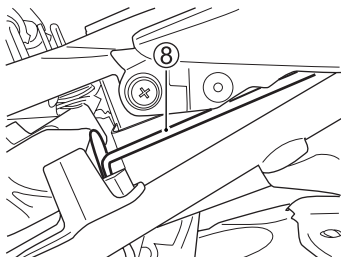
8. Disconnect the couplers.

NOTE: Drain the fuel from the fuel tank before tilting up the fuel tank if the fuel tank is full.

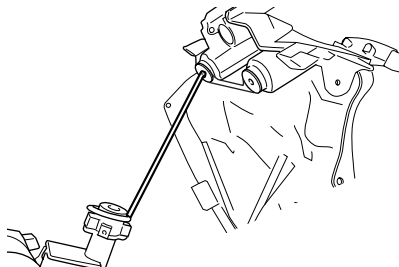


9. Remove the fasteners from both right and left side.

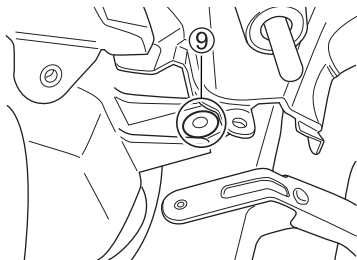
10. Remove the fuel tank fitting bolts ⑦.



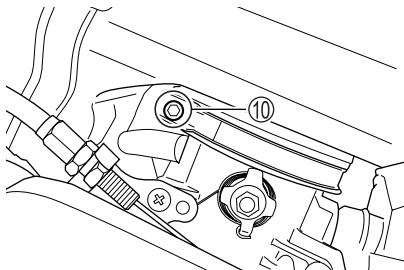
11. To open the tool box, pull out the prop stay ⑧.



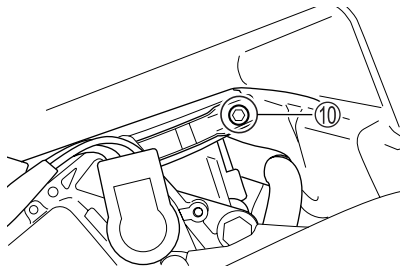
12. Lift the front end of the fuel tank and prop it up as shown above. Put the circle end of the prop stay onto the steering lock assembly.

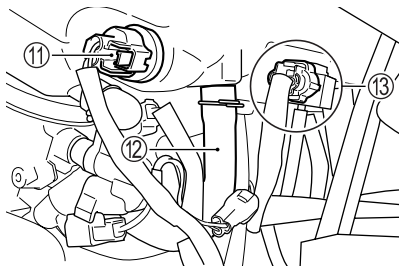


13. Remove the fastener ⑨.

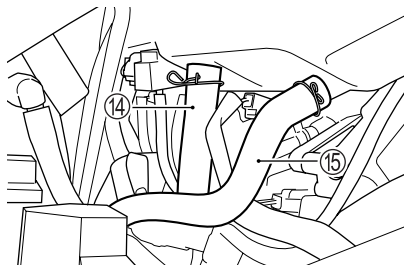


14. Loosen the right and left bolts ⑩.

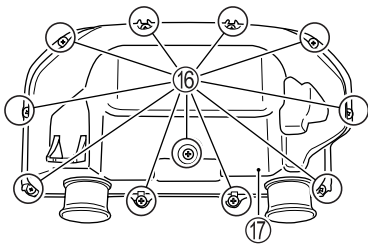




15. Disconnect the coupler ⑪. Pull out the tube ⑫. Disconnect the air cleaner sensor assembly ⑬.

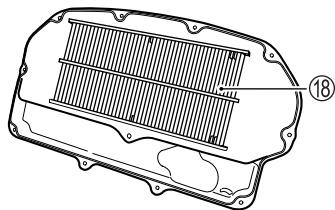


16. Pull out the tubes ⑭, ⑮.
17. Remove the air cleaner box.



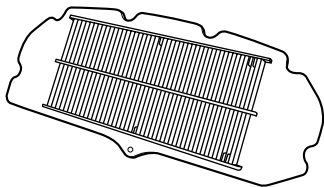
18. Remove the 11 screws ⑩.

19. Remove the cover ⑪.

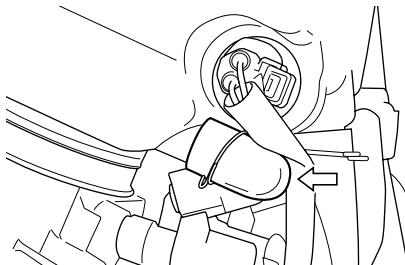


20. Remove the air cleaner element ⑫.

INSPECTION



Inspect the air cleaner element condition.
Replace the air cleaner element periodically.



Remove the plug and drain water and oil at the periodic maintenance interval. The air cleaner drain plug is located beneath the air cleaner box.

INSTALLATION

Reinstall the cleaned element or new air cleaner element in reverse order of removal. Be absolutely sure that the element is securely in position and is sealing properly.

CAUTION

A torn air cleaner element will allow dirt to enter the engine and can damage the engine.

Carefully examine the air cleaner element for tears during cleaning. Replace it with a new one if it is torn.

CAUTION

Failure to position the air cleaner element properly can allow dirt to bypass the air cleaner element. This will cause engine damage.

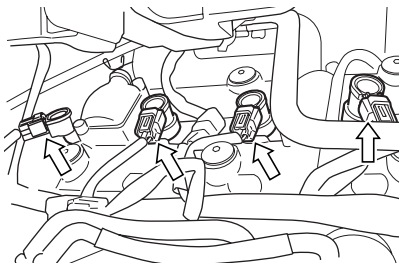
Be sure to properly install the air cleaner element.

SPARK PLUGS

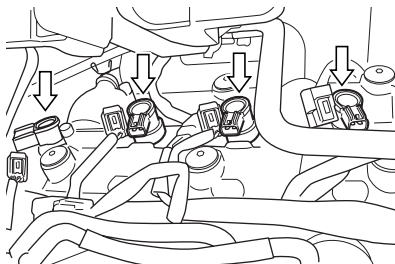
REMOVAL

To remove the spark plugs, follow the procedure below:

1. Lift the fuel tank and remove the air cleaner box by referring to the AIR CLEANER section.



2. Release the connector locks and disconnect the connectors from the ignition coils.

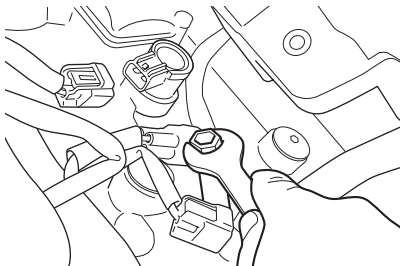


3. Pull off the ignition coils.

CAUTION

Improper removal of ignition coils can damage the ignition coils.

Pull off the ignition coils with your hand.
Do not use pliers.



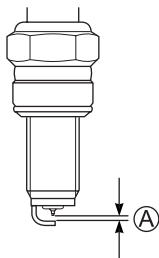
4. Remove the spark plugs with a spark plug wrench.

CAUTION

Dirt can damage your engine if it enters an open spark plug hole.

Cover the spark plug hole whenever the spark plug is removed.

SPARK PLUG INSPECTION



Make sure that the 1.0 mm (0.04 in) wire-type feeler gauge does not insert between the spark plug gap **A**. If the gauge is inserted into the gap, replace the plug with a new one.

Whenever removing the carbon deposits, be sure to observe the operational color of each spark plug's porcelain tip. This color tells you whether or not the standard spark plug is suitable for your type of usage. A normal operating spark plug should be very light brown in color. If the spark plug is very white or glazed appearing, it has been operating much too hot. This spark plug should be replaced with the colder plug.

SPARK PLUG REPLACEMENT GUIDE

CAUTION

An improper spark plug may have an incorrect fit or heat range for your engine. This may cause severe engine damage which will not be covered under warranty.

Use one of the spark plugs listed below or equivalent. Consult your Suzuki dealer or a qualified mechanic if you are not sure which spark plug is correct for your type of usage.

NGK	DENSO	REMARKS
CR8EIA-9	IU24D	If the standard plug is apt to get wet, replace with this plug.
CR9EIA-9	IU27D	Standard
CR10EIA-9	IU31D	If the standard plug is apt to overheat, replace with this plug.

NOTE: This motorcycle uses resistor-type spark plug to avoid jamming electronic parts. Improper spark plug selection may cause electronic interference with your motorcycle's ignition system, resulting in motorcycle performance problems. Use only the recommended spark plugs.

INSTALLATION

CAUTION

A crossthreaded or overtightened spark plug will damage the aluminum threads of the cylinder head.

Follow the procedure below to tighten the spark plug properly.

Carefully turn the spark plug by hand into the threads until it is finger tight. If the spark plug is new, tighten it with a wrench about 1/2 turn past finger tight. If you are reusing the old spark plug, tighten it with a wrench about 1/8 turn past finger tight.

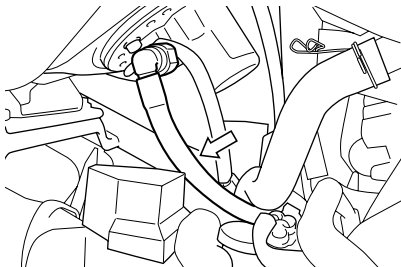
CAUTION

Improper installation of ignition coils can damage the ignition coils.

**Install the ignition coils with your hand.
Never hit the ignition coils with a tool.**

Reinstall the air cleaner box and fuel tank in the reverse order of removal.

FUEL HOSE



Inspect the fuel hose for damage and fuel leakage. If any defects are found, the fuel hose must be replaced.

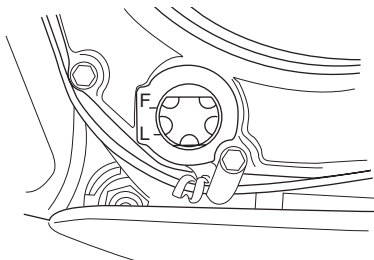
ENGINE OIL

Long engine life depends much on the selection of a quality oil and the periodic changing of the oil. Daily oil level checks and periodic changes are two of the most important maintenance items to be performed.

ENGINE OIL LEVEL CHECK

Follow the procedure below to inspect the engine oil level.

1. Place the motorcycle on level ground on the side stand.
2. Start the engine and run it for a few minutes.
3. Stop the engine and wait 3 minutes.



4. Hold the motorcycle vertically and inspect the engine oil level through the engine oil level inspection window on the right side of the engine.

CAUTION

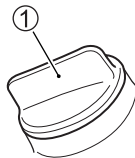
The engine oil level must be between the “L” (Low) line and “F” (Full) line, or engine damage may occur.

Check the oil level, through the inspection window, with the motorcycle held vertically on level ground before each use of the motorcycle.

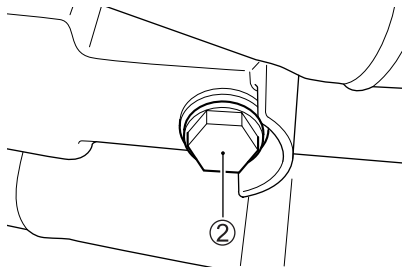
ENGINE OIL AND FILTER CHANGE

Change the engine oil and oil filter at the initial 1000 km (600 miles) and at each maintenance interval. The oil should be changed when the engine is warm so that the oil will drain thoroughly from the engine. The procedure is as follows:

1. Place the motorcycle on the side stand.



2. Remove the oil filler cap ①.



3. Place a drain pan under the drain plug ②.
4. Remove the drain plug with a wrench and drain out the engine oil.

WARNING

Engine oil and exhaust pipes can be hot enough to burn you.

Wait until the oil drain plug and exhaust pipes are cool enough to touch with bare hands before draining oil.

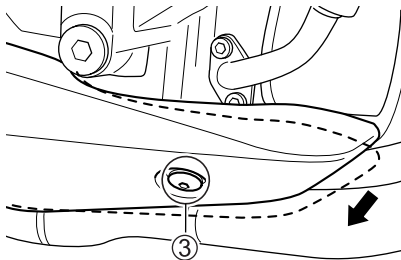
WARNING

New and used oil can be hazardous. Children and pets may be harmed by swallowing new or used oil. Repeated, prolonged contact with used engine oil may cause skin cancer. Brief contact with used oil may irritate skin.

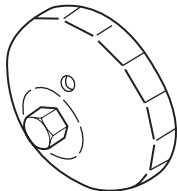
- Keep new and used oil away from children and pets.
- Wear a long-sleeve shirt and waterproof gloves.
- Wash with soap if oil contacts your skin.

NOTE: Recycle or properly dispose of used oil.

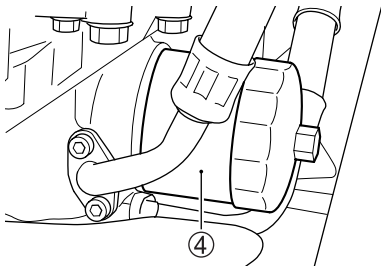
5. Reinstall the drain plug and gasket. Tighten the plug securely with a wrench.



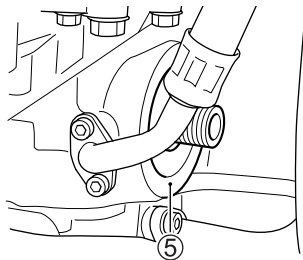
6. Remove the bolt (3). Pull the under cover downward.



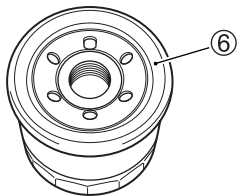
Available from Suzuki dealer
Oil filter wrench (Part No. 09915-40610)



7. Turn the oil filter ④ counterclockwise and remove it with a Suzuki “cap type” oil filter wrench or a “strap type” filter wrench of the proper size.



8. Wipe off the mounting surface ⑤ on the engine where the new filter will be seated with a clean rag.



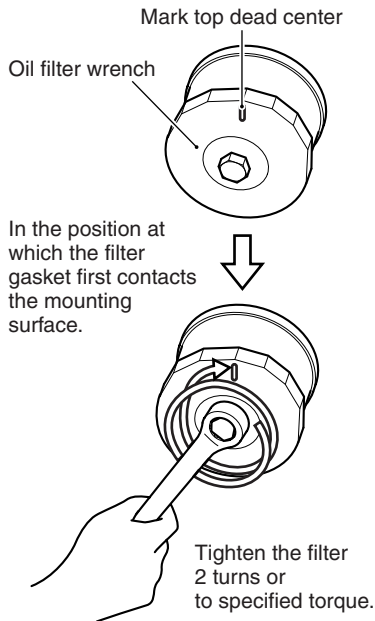
9. Smear a little engine oil around the rubber gasket ⑥ of the new oil filter.
10. Screw the new filter by hand until the filter gasket contacts the mounting surface (a small resistance will be felt).

CAUTION

Using an oil filter with the wrong design or thread specifications can cause oil leaks or engine damage.

Use a genuine SUZUKI oil filter or an equivalent filter designed for your motorcycle.

NOTE: To tighten the oil filter properly, it is important to accurately identify the position at which the filter gasket first contacts the mounting surface.



11. Mark the top dead center position on the “cap type” filter wrench or on the oil filter. Use an oil filter wrench to tighten the filter 2 turns or to specified torque.

Oil filter tightening torque:
20 N·m (2.0 kgf-m, 14.5 lb-ft)

12. Pour 3300 ml (3.5/2.9 US/Imp. qt) of new engine oil through the filler hole and install the filler cap. Be sure to always use the specified engine oil described in the FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS section.

NOTE: About 3100 ml (3.3/2.7 US/Imp. qt) of oil will be required when changing oil only.

CAUTION

Engine damage may occur if you use oil that does not meet Suzuki's specifications.

Use the oil specified in the FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS section.

NOTE: If you do not have a proper oil filter wrench, have your Suzuki dealer perform this service.

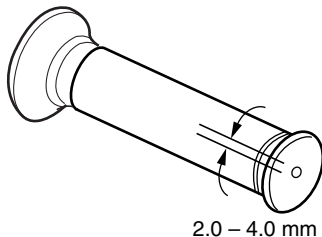
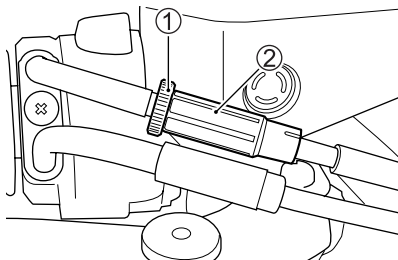
13. With the engine running, look carefully for leaks at the oil filter and drain plug. Run the engine at various speeds for 2 to 3 minutes.
14. Stop the engine and wait 3 minutes. Check the oil level again. Engine oil level can be inspected through the inspection window while holding the motorcycle vertically. If the oil level is lower than the "F" line, add new oil until it reaches the "F" line. Check for leaks again.

ENGINE IDLE SPEED INSPECTION

Inspect the engine idle speed. The engine idle speed should be 1050 – 1250 r/min when the engine is warm.

NOTE: If the engine idle speed is not within the specified range, ask your Suzuki dealer or a qualified mechanic to inspect and repair the motorcycle.

THROTTLE CABLE PLAY



To adjust the cable play:

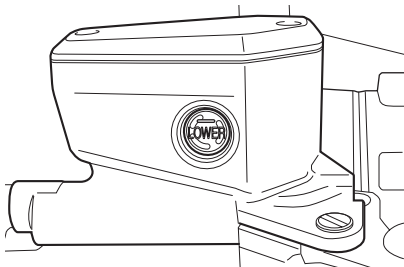
1. Loosen the lock nut ①.
2. Turn the adjuster ② so that the throttle grip has 2.0 – 4.0 mm (0.08 – 0.16 in) play.
3. Tighten the lock nut ①.

WARNING

Inadequate throttle cable play can cause engine speed to rise suddenly when you turn the handlebar. This can lead to loss of rider control.

Adjust the throttle cable play so that engine idle speed does not rise due to handlebar movement.

CLUTCH



The clutch release mechanism of this motorcycle is operated by hydraulic pressure. There is no adjustment needed on the clutch release system because the system is self adjusting. However, inspect the following each time before driving to make sure that the system is in good condition and functioning properly.

- Fluid level in the reservoir to be above “LOWER” line.
- No fluid leakage.
- Smooth and sure action of clutch lever.

WARNING

Brake fluid is harmful or fatal if swallowed, and harmful if it comes in contact with skin or eyes.

If swallowed, do not induce vomiting. Immediately contact a poison control center or a physician. If brake fluid gets in eyes, flush eyes with water and seek medical attention. Wash thoroughly after handling. Solution can be poisonous to animals. Keep out of the reach of children and animals.

WARNING

Failure to keep the clutch fluid reservoir full with the proper brake fluid can be hazardous. The clutch may not work correctly without the proper amount and type of brake fluid. This could lead to an accident.

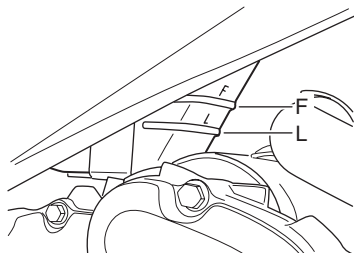
Inspect the clutch fluid level before each use. Use only DOT4 brake fluid from a sealed container. Never use or mix different types of brake fluid. If there is frequent loss of fluid, take your motorcycle to a Suzuki dealer or a qualified mechanic for inspection.

CAUTION

Spilled brake fluid can damage painted surfaces and plastic parts.

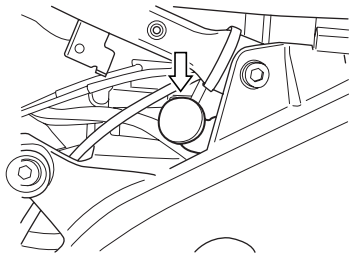
Avoid spilling any fluid when filling the reservoir. Wipe up spills immediately.

COOLANT COOLANT LEVEL



The coolant should be kept between the “F” (FULL) and the “L” (LOW) level lines in the reservoir tank at all times. Inspect the level every time before riding with the motorcycle held vertically. If the coolant is found lower than the “L” level line, add properly mixed coolant in the following way:

1. Place the motorcycle on the side stand.
2. Remove the side frame cover by referring to the AIR CLEANER section.



3. Remove the filler cap and add properly mixed coolant through the filler hole until it reaches the "F" line. Refer to the FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS section.

WARNING

Engine coolant is harmful or fatal if swallowed or inhaled.

Do not drink antifreeze or coolant solution. If swallowed, do not induce vomiting. Immediately contact a poison control center or a physician. Avoid inhaling mist or hot vapors; if inhaled, remove to fresh air. If coolant gets in eyes, flush eyes with water and seek medical attention. Wash thoroughly after handling. Solution can be poisonous to animals. Keep out of the reach of children and animals.

NOTE: Adding only water will dilute the engine coolant and reduce its effectiveness. Add a 50:50 mixture of engine coolant and water.

CHANGING THE COOLANT

Change the coolant every 2 years.

NOTE: About 2900 ml (3.1/2.6 US/Imp. qt) of coolant will required when filling the radiator and reservoir tank.

DRIVE CHAIN

This motorcycle has an endless drive chain constructed from special materials. It does not use a master link. We recommend that you take your motorcycle to an authorized Suzuki dealer or a qualified mechanic if the drive chain needs to be replaced.

The condition and adjustment of the drive chain should be checked each day before you ride. Always follow the guide lines for inspecting and servicing the chain.

WARNING

Riding with the chain in poor condition or improperly adjusted can lead to an accident.

Inspect, adjust, and maintain the chain properly before each ride, according to this section.

Inspecting the Drive Chain

When inspecting the chain, look for the following:

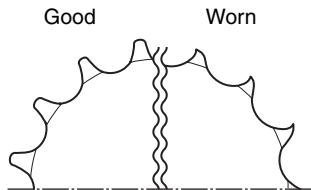
- Loose pins
- Damaged rollers
- Dry or rusted links
- Kinked or binding links
- Excessive wear
- Improper chain adjustment

If you find anything wrong with the drive chain condition or adjustment, correct the problem if you know how. If necessary, consult your authorized Suzuki dealer or a qualified mechanic.

Damage to the drive chain means that the sprockets may also be damaged. Inspect the sprockets for the following:

- Excessively worn teeth
- Broken or damaged teeth
- Loose sprocket mounting nuts

If you find any of these problems with your sprocket, consult your Suzuki dealer or a qualified mechanic.



NOTE: The two sprockets should be inspected for wear when a new chain is installed and replace them if necessary.

WARNING

Improperly installing a replacement chain, or using a joint-clip type chain, can be hazardous. An incompletely riveted master link, or a joint-clip type master link, may come apart and cause an accident or severe engine damage.

Do not use a joint-clip type chain. Chain replacement requires a special riveting tool and a high-quality, non-joint-clip type chain. Ask an authorized SUZUKI dealer or a qualified mechanic to perform this work.

DRIVE CHAIN CLEANING AND OILING

This drive chain has special “O” rings that permanently seal grease inside. Clean and oil the chain periodically, as follows:

1. Clean the chain with kerosene. If the chain tends to rust, the interval must be shortened. Kerosene is a petroleum product and will provide some lubrication as well as cleaning action.

WARNING

Kerosene can be hazardous. Kerosene is flammable. Children or pets may be harmed from contact with kerosene.

Keep flames and smoking materials away from kerosene. Keep children and pets away from kerosene. If swallowed, do not induce vomiting. Call a physician immediately. Dispose of used kerosene properly.

CAUTION

Cleaning the chain with gasoline or commercial cleaning solvents can damage O-rings and ruin the chain.

Clean the drive chain with kerosene only.

2. After thoroughly washing the chain and allowing it to dry, oil the links with Suzuki chain lube or an equivalent chain lubricant.

CAUTION

Some drive chain lubricants contain solvents and additives which could damage the O-rings in your chain.

Use Suzuki chain lube or an equivalent chain lubricant that is specifically intended for use with O-ring chains.

DRIVE CHAIN ADJUSTMENT

Adjust the drive chain slack to the proper specification. The chain may require more frequent adjustments than periodic maintenance schedule depending upon your riding conditions.

WARNING

Too much chain slack can cause the chain to come off the sprockets, resulting in an accident or serious damage to the motorcycle.

Inspect and adjust the drive chain slack before each use.

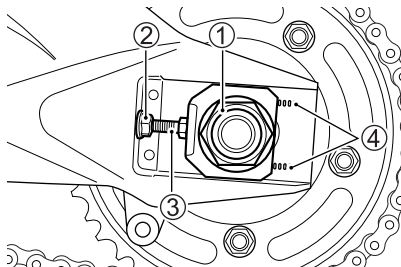
To adjust the drive chain, follow the procedure below:

⚠ WARNING

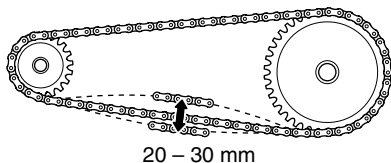
A hot muffler can burn you. The muffler will be hot enough to burn you for some time after stopping the engine.

Wait until the muffler cools to avoid burns.

1. Place the motorcycle on the side stand.



2. Loosen the axle nut ①.
3. Loosen the right and left lock nut ②.



4. Adjust the drive chain slack by turning the right and left chain adjuster bolts ③. At the same time that the chain is being adjusted, the rear sprocket must be kept in perfect alignment with the front sprocket. To assist you in performing this procedure, there are reference marks ④ on the swingarm and each chain adjuster which are to be aligned with each other and to be used as a reference from one side to the other.
5. Tighten the right and left lock nut ②.
6. Tighten the axle nut ① securely.
7. Recheck the chain slack after tightening and readjust if necessary.

Rear axle nut tightening torque:
100 N·m (10.0 kgf-m, 72.5 lb-ft)

NOTE: Do not adjust the drive chain beyond the adjustable range ④. Replace the drive chain before the drive chain exceeds the limit.

BRAKES

This motorcycle utilizes front and rear disk brakes. Proper operation of brake systems are vital to safe riding. Be sure to perform the brake inspection requirements as scheduled.

BRAKE SYSTEM

WARNING

Failure to inspect and properly maintain the brakes increases your chance of having an accident.

Inspect the brake system before each use according to the INSPECTION BEFORE RIDING section. Follow the MAINTENANCE SCHEDULE section to maintain your brake system.

Inspect your brake system for the following items daily:

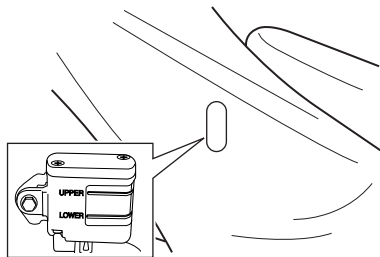
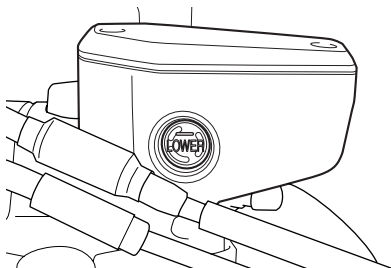
- Inspect the fluid level in the reservoirs.
- Inspect the front and rear brake system for signs of fluid leakage.
- Inspect the brake hose for leakage or a cracked appearance.
- The brake lever and pedal should have the proper stroke and be firm at all times.
- Check the wear of the disk brake pads.

BRAKE FLUID

WARNING

Brake fluid is harmful or fatal if swallowed, and harmful if it comes in contact with skin or eyes.

If swallowed, do not induce vomiting. Immediately contact a poison control center or a physician. If brake fluid gets in eyes, flush eyes with water and seek medical attention. Wash thoroughly after handling. Solution can be poisonous to animals. Keep out of the reach of children and animals.



Check the brake fluid level in both the front and rear brake fluid reservoirs. Inspect for brake pad wear and leaks.

WARNING

Failure to keep the brake fluid reservoir full with proper brake fluid can be hazardous. The brakes may not work correctly without the proper amount and type of brake fluid. This could lead to an accident.

Inspect the brake fluid level before each use. Use only DOT4 brake fluid from a sealed container. Never use or mix different types of brake fluid. If there is frequent loss of fluid, take your motorcycle to a SUZUKI dealer or a qualified mechanic for inspection.

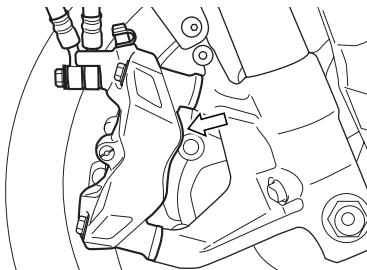
CAUTION

Spilled brake fluid can damage painted surfaces and plastic parts.

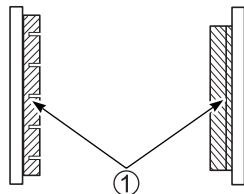
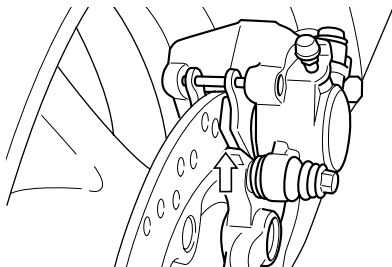
Avoid spilling any fluid when filling the reservoir. Wipe up spills immediately.

BRAKE PADS

FRONT



REAR



FRONT

REAR

Inspect the front and rear brake pads by noting whether or not the friction pads are worn down to the grooved limit line ①. If a front or rear pad is worn to the grooved limit line both front or both rear pads must be replaced with new ones by your authorized Suzuki dealer or a qualified service mechanic.

WARNING

Riding with worn brake pads will reduce braking performance and will increase your chance of having an accident.

Inspect brake pad wear before each use. Ask your SUZUKI dealer or a qualified mechanic to replace brake pads if any pad is worn to the limit.

WARNING

Failure to extend brake pads after repair or replacement can cause poor braking performance and may result in an accident.

Before riding, “pump” the brake lever/pedal repeatedly until brake pads are pressed against the brake disks and proper lever/pedal stroke and firm feel are restored.

NOTE: Do not squeeze/depress the brake lever/pedal when the pads are not in their positions. It is difficult to push the pistons back and brake fluid leakage may result.

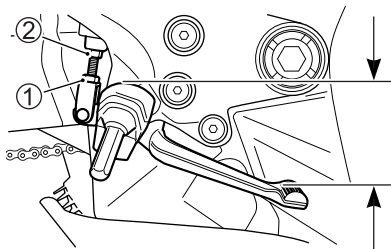
WARNING

Replacing only one or the two brake pads can result in uneven braking action.

Replace both pads together.

REAR BRAKE PEDAL ADJUSTMENT

The rear brake pedal position must be properly adjusted at all times or the disk brake pads will rub against the disk causing damage to the pads and to the disk surface. Adjust the brake pedal position in the following manner:



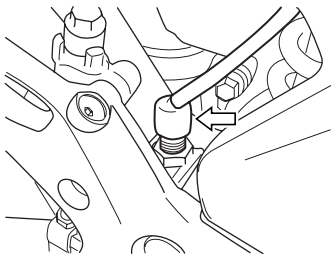
1. Loosen the lock nut ①, and rotate the push rod ② to locate the pedal 55 – 65 mm (2.2 – 2.6 in) below the top face of the footrest.
2. Retighten the lock nut ① to secure the push rod ② in the proper position.

CAUTION

An incorrectly adjusted brake pedal may force brake pads to rub against the disk at all times, causing damage to the pads and disk.

Follow the steps in this section to adjust the brake pedal properly.

REAR BRAKE LIGHT SWITCH



To adjust the brake light switch, raise or lower the switch so that the brake light will come on just before a pressure rise is felt when the brake pedal is depressed.

TIRES

⚠ WARNING

Failure to follow these warnings may result in an accident due to tire failure. The tires on your motorcycle form the crucial link between your motorcycle and the road.

Follow these instructions;

- Check tire condition and pressure, and adjust pressure before each ride.
- Avoid overloading your motorcycle.
- Replace a tire when worn to the specified limit, or if you find damage such as cuts or cracks.
- Always use the size and type of tires specified in this owner's manual.
- Balance the wheel after tire installation.
- Read this section of the owner's manual carefully.

WARNING

Failure to perform break-in of the tires could cause tire slip and loss of control.

Use extra care when riding on new tires. Perform proper break-in of the tires referring to the BREAK-IN section and avoid hard acceleration, hard cornering, and hard braking for the first 160 km (100 miles).

TIRE PRESSURE AND LOADING

Proper tire pressure and proper tire loading are important factors. Overloading your tires can lead to tire failure and loss of vehicle control.

Check tire pressure each day before you ride, and be sure the pressure is correct for the vehicle load according to the table below. Tire pressure should only be checked and adjusted before riding, since riding will heat up the tires and lead to higher inflation pressure readings.

Under-inflated tires make smooth cornering difficult, and can result in rapid tire wear. Over-inflated tires cause a smaller amount of tire to be in contact with the road, which can contribute to skidding and loss of control.

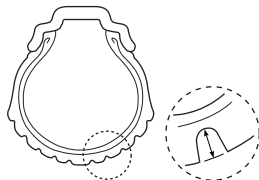
Cold Tire Inflation Pressure

TIRE \ LOAD	SOLO RIDING	DUAL RIDING
FRONT	250 kPa 2.50 kgf/cm ² 36 psi	250 kPa 2.50 kgf/cm ² 36 psi
REAR	290 kPa 2.90 kgf/cm ² 42 psi	290 kPa 2.90 kgf/cm ² 42 psi

NOTE: When you detect drops in tire pressure, check the tire for nails or other punctures, or a damaged wheel rim. Tubeless tires sometimes lose pressure gradually when punctured.

TIRE CONDITION AND TYPE

Proper tire condition and proper tire type affect vehicle performance. Cuts or cracks in the tires can lead to tire failure and loss of vehicle control. Worn tires are susceptible to puncture failures and subsequent loss of vehicle control. Tire wear also affects the tire profile, changing vehicle handling characteristics.



Check tire condition of your tires each day before you ride. Replace tires if tires show visual evidence of damage, such as cracks or cuts, or if tread depth is less than 1.6 mm (0.06 in) front, 2.0 mm (0.08 in) rear.

NOTE: These wear limits will be reached before the wear bars molded into the tire make contact with the road.

When you replace a tire, be sure to replace it with a tire of the size and type listed below. If you use a different size or type of tire, vehicle handling may be adversely affected, possibly resulting in loss of vehicle control.

	FRONT	REAR
SIZE	120/70ZR17M/C (58W)	200/50ZR17M/C (75W)
TYPE	DUNLOP Qualifier MT	DUNLOP Qualifier NK

Be sure to balance the wheel after repairing a puncture or replacing the tire. Proper wheel balance is important to avoid variable wheel-to-road contact, and to avoid uneven tire wear.

WARNING

An improperly repaired, installed, or balanced tire can cause loss of control or shorten tire life.

- **Ask your SUZUKI dealer or a qualified mechanic to perform tire repair, replacement, and balancing because proper tools and experience are required.**
- **Install tires according to the rotation direction shown by arrows on the side-wall of each tire.**

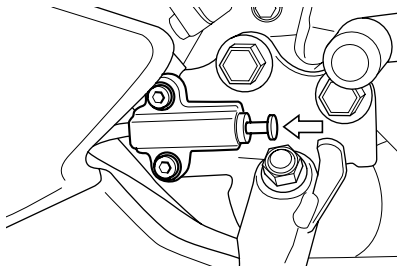
WARNING

Failure to follow these instructions about tubeless tires may result in an accident due to tire failure. Tubeless tires require different service procedures than tube tires.

- Tubeless tires require an air-tight seal between the tire bead and wheel rim. Special tire irons and rim protectors or a specialized tire mounting machine must be used for removing and installing tires to prevent tire or rim damage which could result in an air leak.
- Repair punctures in tubeless tires by removing the tire and applying an internal patch.

- Do not use an external repair plug to repair a puncture since the plug may work loose as a result of the cornering forces experienced by a motorcycle tire.
- After repairing a tire, do not exceed 80 km/h (50 mph) for the first 24 hours, 130 km/h (80 mph) thereafter. This is to avoid excessive heat build-up which could result in a tire repair failure and tire deflation.
- Replace the tire if it is punctured in the sidewall area, or if a puncture in the tread area is larger than 6 mm (3/16 in). These punctures cannot be repaired adequately.

SIDE STAND/IGNITION INTERLOCK SWITCH



Check the side stand/ignition interlock switch for proper operation as follows:

1. Sit on the motorcycle in the normal riding position, with the side stand up.
2. Shift into first gear, hold the clutch in, and start the engine.
3. While continuing to hold the clutch in, move the side stand to the down position.

If the engine stops running when the side stand is moved to the down position, then the side stand/ignition interlock switch is working properly. If the engine continues to run with the side stand down and the transmission in gear, then the side stand/ignition interlock switch is not working properly. Have your motorcycle inspected by an authorized Suzuki dealer or a qualified service mechanic.

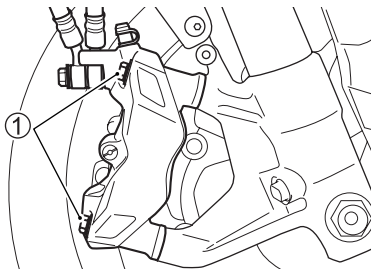
WARNING

If the side stand/ignition interlock system is not working properly, it is possible to ride the motorcycle with the side stand in the down position. This may interfere with rider control during a left turn.

Check the side stand/ignition interlock system for proper operation before riding. Check that the side stand is returned to its full up position before starting off.

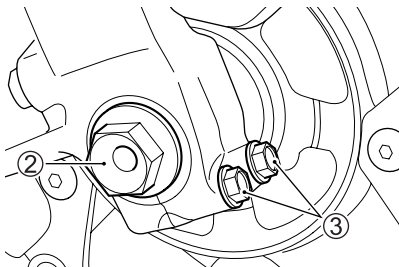
FRONT WHEEL REMOVAL

1. Place the motorcycle on the side stand.

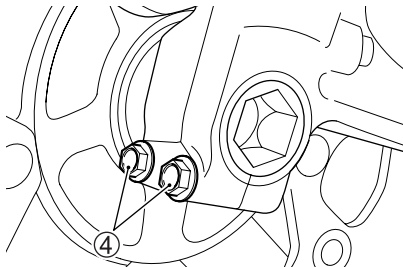


2. Remove both brake calipers from the front forks by removing 2 mounting bolts ① on each of the calipers.

NOTE: Never squeeze the front brake lever with the caliper removed. It is very difficult to force the pads back into the caliper assembly and brake fluid leakage may result.



3. Remove the bolt ②.
4. Loosen the axle holder bolts ③.

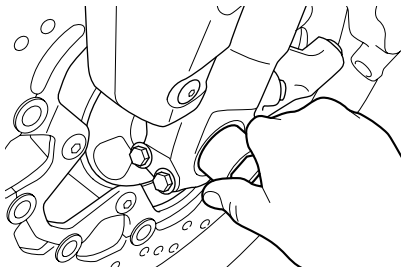


5. Loosen the axle holder bolts ④.
6. Place an accessory service stand or an equivalent stand under the swingarm to help stabilize the rear end.
7. Carefully position a jack under the exhaust pipe and raise until the front wheel is slightly off the ground.

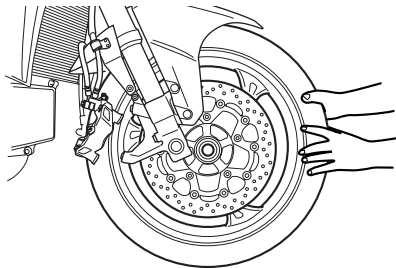
CAUTION

Improper jacking may cause damage to the fairing or oil filter.

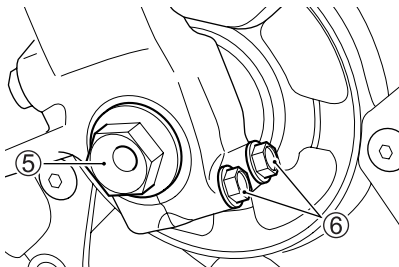
Do not apply the jack head to the fairing lower part or the oil filter when jacking up the motorcycle.



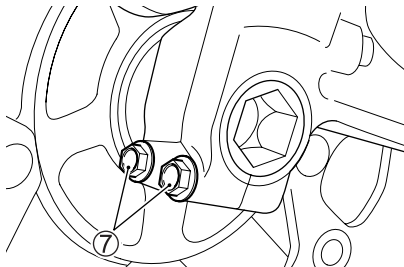
8. Draw out the axle shaft.



- 9. Slide the front wheel forward.
- 10. Put the new wheel in place and insert the axle shaft.
- 11. Remove the jack and service stand.



12. Hold the shaft and tighten the bolt ⑤ to the specified torque.
13. Tighten the axle holder bolts ⑥ to the specified torque.
14. Move the steering up and down several times to seat the axle shaft.



15. Tighten the axle holder bolts ⑦ to the specified torque.
16. Reinstall the brake calipers.
17. After installing the wheel, apply the brake several times to restore the proper lever stroke.

WARNING

Failure to extend brake pads after installing the wheel can cause poor braking performance and may result in an accident.

Before riding, “pump” the brake lever repeatedly until brake pads are pressed against the brake disks and proper lever stroke and firm feel are restored. Also check that the wheel rotates freely.

WARNING

Installing the front wheel in the reverse direction can be hazardous. The tire for this motorcycle is directional. Therefore, the motorcycle may have unusual handling if the wheel is installed incorrectly.

Install the front wheel in the specified direction, as indicated by the arrow on the sidewall of the tire.

WARNING

Failure to torque bolts and nuts properly could lead to an accident.

Torque bolts and nuts to the proper specifications. If you are not sure of the proper procedure, have your authorized **SUZUKI** dealer or a qualified mechanic do this.

Front axle tightening torque:
100 N·m (10.0 kgf-m, 72.5 lb-ft)

Front axle holder bolt
tightening torque:
23 N·m (2.3 kgf-m, 16.5 lb-ft)

Front brake caliper mounting bolt
tightening torque:
39 N·m (3.9 kgf-m, 28.0 lb-ft)

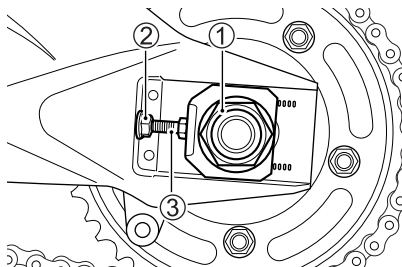
REAR WHEEL REMOVAL

WARNING

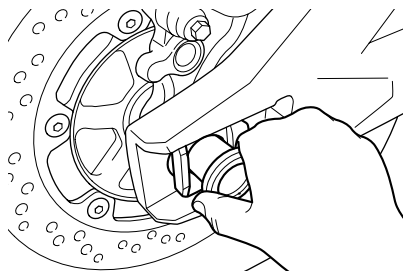
A hot muffler can burn you. The muffler will be hot enough to burn you for some time after stopping the engine.

Wait until the muffler cools to avoid burns.

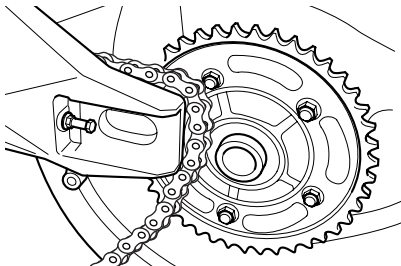
1. Place the motorcycle on the side stand.



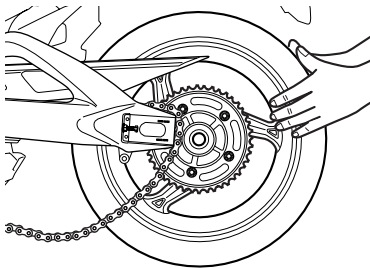
2. Remove the axle nut ①.
3. Place an accessory service stand or an equivalent stand under the swing arm to lift the rear wheel slightly off the ground.
4. Loosen the right and left lock nut ②. Turn the right and left chain adjuster bolts ③ clockwise.



5. Draw out the axle shaft.



6. With the wheel moved forward, remove the chain from the sprocket.



7. Pull the rear wheel assembly rearward.

NOTE: Never depress the rear brake pedal with the rear wheel removed. It is very difficult to force the pads back into the caliper assembly.

8. To replace the wheel reverse the complete sequence listed.
9. Adjust the drive chain slack.
10. After installing the wheel, apply the brake several times and then check that the wheel rotates freely.

WARNING

Failure to adjust the drive chain and failure to torque bolts and nuts properly could lead to an accident.

- Adjust the drive chain as described in **DRIVE CHAIN ADJUSTMENT** section after installing the rear wheel.
- Torque bolts and nuts to the proper specifications. If you are not sure of the proper procedure, have your authorized **SUZUKI** dealer or a qualified mechanic do this.

Rear axle nut tightening torque:
100 N·m (10.0 kgf-m, 72.5 lb-ft)

WARNING

Failure to extend brake pads after installing the wheel can cause poor braking performance and may result in an accident.

Before riding, “pump” the brake pedal repeatedly until brake pads are pressed against the brake disks and proper pedal stroke and firm feel are restored. Also check that the wheel rotates freely.

LIGHT BULB REPLACEMENT

The wattage rating of each bulb is shown on the table below. When replacing a burned out bulb, always use the exact same wattage rating. Using other than the specified rating can result in overloading the electrical system or premature failure of a bulb.

CAUTION

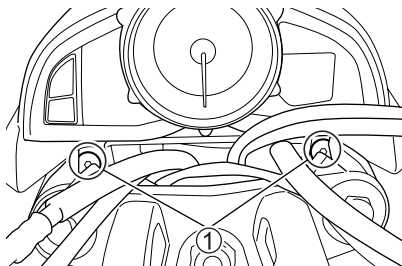
Using a light bulb with the wrong wattage rating can cause electrical system damage or shorten bulb life.

Always use the specified light bulb.

Headlight	12V 60/55W (H4)
Position light	12V 5W × 2
Turn signal light	12V 21W × 2
License plate light	12V 5W

HEADLIGHT

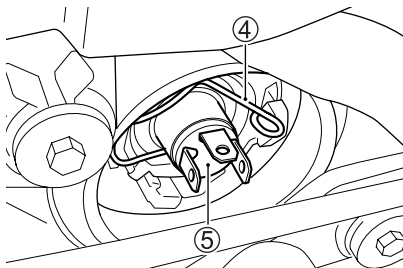
To replace the headlight bulb, perform the following steps:



1. Remove the bolts ①. Tilt up the rear end of the instrument panel.



2. Pull up the rubber cover. Disconnect the socket ② from the headlight and remove the rubber cap ③.



3. Unhook the bulb holder spring ④ and pull out the bulb ⑤.

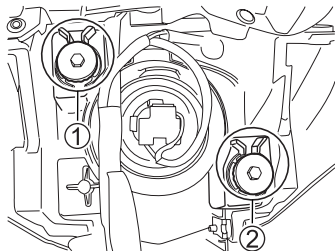
CAUTION

Oil from your skin may damage the headlight bulb or shorten its life.

Grasp the new bulb with a clean cloth.

Headlight Beam Adjustment

The headlight beam can be adjusted both vertically and horizontally if necessary. Pull up the rubber cover to adjust the headlight beam.



To adjust the beam vertically:

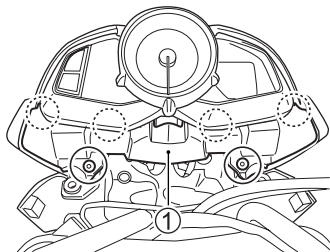
Turn the adjuster ① clockwise or counter-clockwise.

To adjust the beam horizontally:

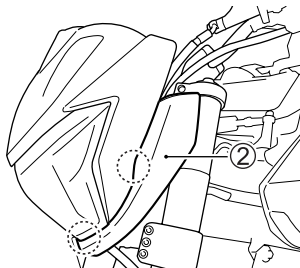
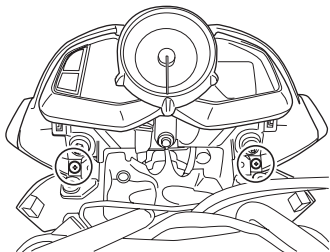
Turn the adjuster ② clockwise or counter-clockwise.

Position Light

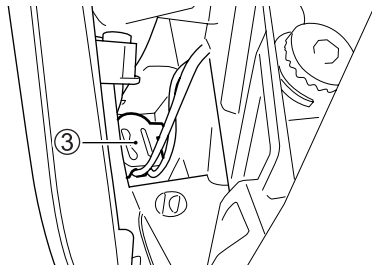
1. Tilt up the instrument panel by referring to the Headlight section.



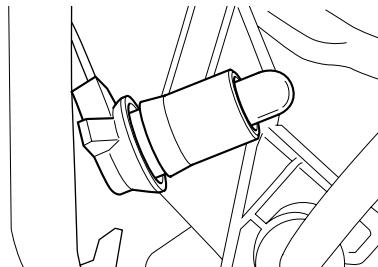
2. Remove the fasteners. Remove the headlight upper cover ① by unhooking the headlight upper cover.



3. Remove the screws. Remove the headlight lower cover ② by unhooking the headlight lower cover.



4. Pull out the socket ③.

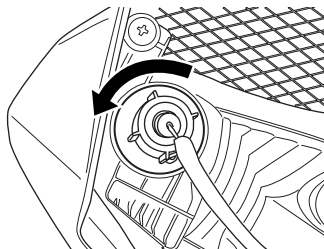


5. Pull off the bulb from the socket.

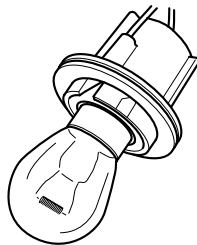
FRONT TURN SIGNAL LIGHT

To replace the turn signal light bulb, follow these directions.

1. Remove the fuel tank covers by referring to the AIR CLEANER section.



2. Turn the socket counterclockwise and remove it.



3. Push in on the bulb, turn it to the left, and pull it out.
4. To fit the replacement bulb, push it in and twist it to the right while pushing.

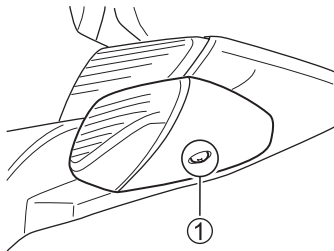
CAUTION

Overtightening the screws when re-installing the lens may cause the lens to crack.

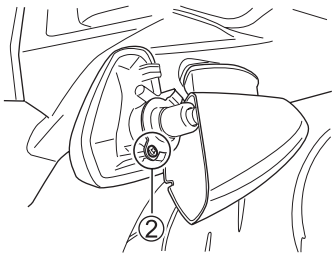
Tighten the screws only until they are snug.

REAR TURN SIGNAL LIGHT

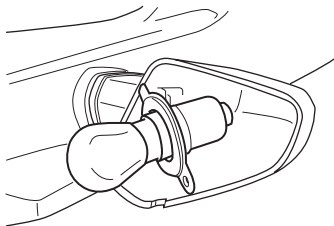
To replace the turn signal light bulb, follow these directions.



1. Remove the screw ①.



2. Pull out the lens. Remove the screw ②.



3. Push in on the bulb, turn it to the left, and pull it out.
4. To fit the replacement bulb, push it in and twist it to the right while pushing.

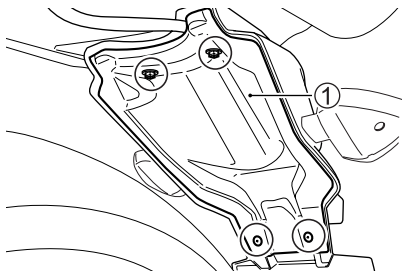
CAUTION

Overtightening the screws when reinstalling the lens may cause the lens to crack.

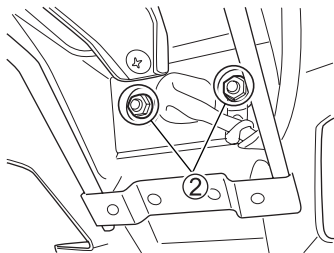
Tighten the lens screws only until they are snug.

LICENSE PLATE LIGHT

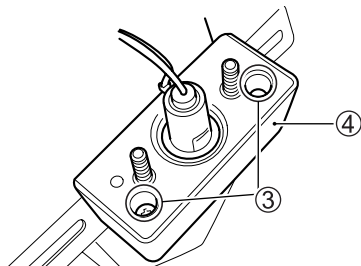
To replace the license plate light bulb, follow the procedure steps:



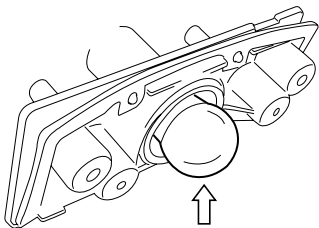
1. Remove the bolts and screws. Remove the rear fender cover ①.



2. Remove the nuts ②.



3. Remove the screws ③ and take off the lens ④.



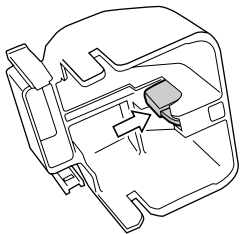
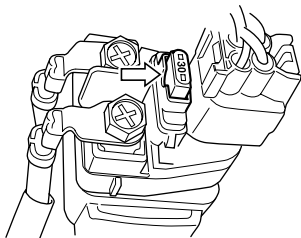
4. Push in on the bulb, twisting it to the left, and pull it out.
5. To fit the replacement bulb, push it in and twist it to the right while pushing.

CAUTION

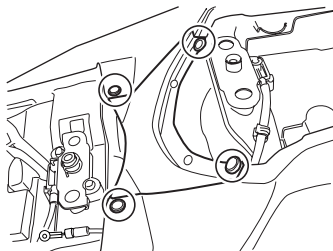
Overtightening the screws when reinstalling the lens may cause the lens to crack.

Tighten the screws only until they are snug.

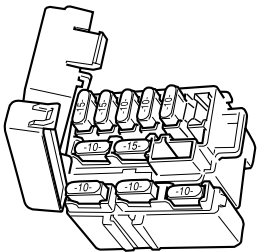
FUSES



The main fuse is located under the center lid. To access the fuse, remove the seat by referring to the SEAT LOCK AND HELMET HOLDER section.



Remove the fasteners. Remove the center lid. One 30A spare fuse is located inside the fuse box cover.



The fuses are located under the front seat. Remove the front seat by referring to the SEAT LOCK AND HELMET HOLDER section. Three spare fuses (one 15A and two 10A) are provided inside the fuse box.

The fuses are designed to open when a circuit overload exists in individual electrical system circuits. If any electrical system fails to operate, then the fuses must be checked.

CAUTION

Installing a fuse of incorrect rating or using aluminum foil or wire instead of a fuse may seriously damage the electrical system.

Always replace a blown fuse with a fuse of the same type and rating. If the new fuse blows in a short time, consult your Suzuki dealer or a qualified mechanic immediately.

FUSE LIST

- 30A MAIN fuse protects all electrical circuits.
- 10A HEAD-HI fuse protects the headlight high beam and speedometer.
- 10A HEAD-LO fuse protects the headlight low beam.
- 10A IGNITION fuse protects the cooling fan relay, ignition coils, starter relay, fuel pump relay, solenoid, ECU, oxygen sensor, side stand relay and *Immobilizer.
- 10A SIGNAL fuse protects the turn signal lights, position lights, taillight, stop lamp, license light, speedometer and horn.
- 10A FUEL fuse protects the speedometer, fuel injectors, fuel pump and ECU.
- 15A FAN.R fuse protects the cooling fan motor R.
- 15A FAN.L fuse protects the cooling fan motor L.

* Except for Canada



TROUBLESHOOTING

FUEL SUPPLY CHECK	7-2
IGNITION SYSTEM CHECK	7-3
ENGINE STALLING	7-4

TROUBLESHOOTING

This troubleshooting guide is provided to help you find the cause of some common complaints.

CAUTION

Failure to troubleshoot a problem correctly can damage your motorcycle. Improper repairs or adjustments may damage the motorcycle instead of fixing it. Such damage may not be covered under warranty.

If you are not sure about the proper action, consult your Suzuki dealer or a qualified mechanic about the problem.

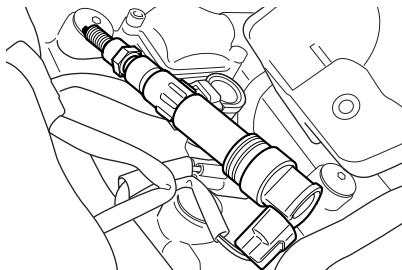
If the engine refuses to start, perform the following inspections to determine the cause.

FUEL SUPPLY CHECK

If the fuel injection indicator displays “FI”, showing signs of trouble in the fuel injection system, take your machine to an authorized Suzuki dealer. Refer to the “INSTRUMENT PANEL” section for an explanation of fuel injection system indicator. If the indicator does not display “FI”, make sure there is enough fuel in the fuel tank. If the indicator does not display “FI” and there is enough fuel, the ignition system should be checked.

IGNITION SYSTEM CHECK

1. Remove the spark plug and reattach it to the ignition coil.



2. While holding the spark plug firmly against the crank case of the engine, push the starter switch with the ignition switch in the "ON" position, the engine stop switch in the "O" position, the transmission in neutral, and the clutch disengaged. If the ignition system is operating properly, a blue spark should jump across the spark plug gap.
3. If there is no spark, clean the spark plug. Replace it if necessary. Retry the above procedure with the cleaned spark plug or new one.
4. If there is still no spark, consult your Suzuki dealer for repairs.

WARNING

Performing the spark test improperly can cause a high voltage electrical shock or an explosion.

Avoid performing this check if you are not familiar with this procedure, or if you have a heart condition or wear a pacemaker. Keep the spark plug away from the spark plug hole during this test.

ENGINE STALLING

1. Make sure there is enough fuel in the fuel tank.
2. If the fuel injection indicator displays “FI”, showing signs of trouble in the fuel injection system, take your machine to an authorized Suzuki dealer. Refer to the “INSTRUMENT PANEL” section for an explanation of the fuel injection system indicator.
3. Check the ignition system for intermittent spark.
4. Check that the engine idles smoothly and steadily.

MOTORCYCLE CLEANING AND STORAGE PROCEDURE

MOTORCYCLE CLEANING	8-2
STORAGE PROCEDURE	8-5
PROCEDURE DURING STORAGE	8-7
PROCEDURE FOR RETURNING TO SERVICE	8-7

MOTORCYCLE CLEANING AND STORAGE PROCEDURE

MOTORCYCLE CLEANING

Washing the Motorcycle

When washing the motorcycle, follow the instruction below:

1. Remove dirt and mud from the motorcycle with running water. You may use a soft sponge or brush. Do not use hard materials which can scratch the paint.
2. Wash the entire motorcycle with a mild detergent or car wash soap using a sponge or soft cloth. The sponge or cloth should be frequently soaked in the soap solution.

CAUTION

Radiator fins can be damaged by spraying high pressure water on them.

Do not spray high pressure water on the radiator fins.

NOTE: Avoid spraying or allowing water to flow over the following places:

- Ignition switch
- Spark plugs
- Fuel tank cap
- Fuel injection system
- Brake master cylinders
- Clutch master cylinder

CAUTION

High pressure washers and parts cleaner can damage your motorcycle.

Do not use high pressure washers to clean your motorcycle. Do not use parts cleaner to throttle body and fuel injection sensors.

3. Once the dirt has been completely removed, rinse off the detergent with running water.
4. After rinsing, wipe off the motorcycle with a wet chamois or cloth and allow it to dry in the shade.

5. Check carefully for damage to painted surfaces. If there is any damage, obtain "touch-up" paint and "touch-up" the damage following the procedure below:
 - a. Clean all damaged spots and allow them to dry.
 - b. Stir the paint and "touch-up" the damaged spots lightly with a small brush.
 - c. Allow the paint to dry completely.

CAUTION

Cleaning with any alkaline or strong acid cleaner gasoline, brake fluid, or any other solvent will damage the motorcycle parts.

Clean only with soft cloth and warm water with mild detergent.

Waxing the Motorcycle

After washing the motorcycle, waxing and polishing are recommended to further protect and beautify the paint.

- Only use waxes and polishes of good quality.
- When using waxes and polishes, observe the precautions specified by the manufacturers.

Inspection after Cleaning

For extended life of your motorcycle, lubricate according to “LUBRICATION POINTS” section.

WARNING

Wet brakes can cause poor braking performance and may lead to an accident.

Avoid a possible accident by expecting longer stopping distances after washing your motorcycle. Apply brakes several times to let heat dry the brake pads or shoes.

Follow the procedures in the “INSPECTION BEFORE RIDING” section to check your motorcycle for any problems that may have arisen during your last ride.

STORAGE PROCEDURE

If the motorcycle is to be left unused for extended period of time for winter storage or any other reason, the machine needs special servicing requiring appropriate materials, equipment and skill. For this reason, Suzuki recommends that you trust this maintenance work to your Suzuki dealer. If you need to service the machine for storage yourself, follow the general guidelines below.

MOTORCYCLE

Clean the entire motorcycle. Place the motorcycle on the side stand on a firm, flat surface where it will not fall over.

FUEL

1. Fill the fuel tank to the top with fuel mixed with the amount of gasoline stabilizer recommended by the stabilizer manufacturer.
2. Run the engine for a few minutes until the stabilized gasoline fills the fuel injection system.

ENGINE

1. Pour one tablespoon of motor oil into each spark plug hole. Reinstall the spark plugs and crank the engine a few times.
2. Drain the engine oil thoroughly. Refill the crankcase with fresh engine oil all the way up to the filler hole.

BATTERY

1. Remove the battery from the motorcycle.

NOTE: Be sure to remove the negative terminal first, then remove the positive terminal.

2. Clean the outside of the battery with a mild detergent and remove any corrosion from the terminals and wiring harness connections.
3. Store the battery in a room above freezing.

TIRES

Inflate the tires to the normal specifications.

EXTERNAL

- Spray all vinyl and rubber parts with rubber preservative.
- Spray the unpainted surfaces with rust preventative.
- Coat the painted surfaces with car wax.

PROCEDURE DURING STORAGE

Once a month, recharge the battery with a specified charging rate (Ampere). Standard charging rate is $1.2A \times 5$ to 10 hours.

PROCEDURE FOR RETURNING TO SERVICE

- Clean the entire motorcycle.
- Reinstall the battery.

NOTE: Be sure to connect the positive terminal first, then connect the negative terminal.

- Remove the spark plugs. Turn the engine a few times by putting the transmission in top gear and turning the rear wheel. Reinstall the spark plugs.
- Drain the engine oil thoroughly. Replace the oil filter with a new one and pour fresh oil as outlined in this manual.
- Adjust the pressure of tires as described in the TIRES section.
- Lubricate all places as instructed in this manual.
- Do the INSPECTION BEFORE RIDING as listed in this manual.

SPECIFICATIONS

DIMENSIONS AND DRY MASS

Overall length	2220 mm (87.4 in)	
	2245 mm (88.4 in) ...	Canada
Overall width.....	800 mm (31.5 in)	
Overall height	1085 mm (42.7 in)	
Wheelbase	1525 mm (60.0 in)	
Ground clearance.....	120 mm (4.7 in)	
Seat height	805 mm (31.7 in)	
Dry mass	235 kg (518 lbs)	

ENGINE

Type	Four-stroke, liquid-cooled, DOHC
Number of cylinders	4
Bore	81.0 mm (3.189 in)
Stroke	65.0 mm (2.559 in)
Displacement.....	1340 cm ³ (81.8 cu. in)
Compression ratio	12.5 : 1
Fuel system	Fuel injection
Air cleaner	Paper element
Starter system	Electric
Lubrication system	Wet sump

DRIVE TRAIN

Clutch	Wet multi-plate type
Transmission	6-speed constant mesh
Gearshift pattern	1-down, 5-up
Primary reduction ratio	1.596 (83/52)
Gear ratios, Low	2.615 (34/13)
2nd	1.937 (31/16)
3rd	1.526 (29/19)
4th	1.285 (27/21)
5th	1.136 (25/22)
Top	1.043 (24/23)
Final reduction ratio	2.388 (43/18)
Drive chain	RK GB50GSV Z4, 118 links

CHASSIS

Front suspension	Inverted telescopic, coil spring, oil damped
Rear suspension	Link type, coil spring, oil damped
Front fork stroke	120 mm (4.7 in)
Rear wheel travel	137 mm (5.4 in)
Steering angle	33° (right and left)
Caster	25° 30'
Trail	107 mm (4.21 in)
Turning radius	3.0 m (9.8 ft)
Front brake	Disk brake, twin
Rear brake	Disk brake
Front tire size	120/70ZR17M/C (58W), tubeless
Rear tire size	200/50ZR17M/C (75W), tubeless

ELECTRICAL

Ignition type	Electronic ignition (Transistorized)
Spark plug	NGK CR9EIA-9 or DENSO IU27D
Battery	12V 36.0 kC(10 Ah)/10 HR
Generator	Three-phase A.C. generator
Main fuse	30A
Fuse	15/15/10/10/10/10/10A
Headlight	12V 60/55W (H4)
Turn signal light	12V 21W
License plate light	12V 5W
Brake light/Taillight	LED
Position light	12V 5W × 2
Speedometer light	LED
Tachometer light	LED
Neutral indicator light	LED
High beam indicator light	LED
Turn signal indicator light	LED
Coolant temperature indicator light	LED
Oil pressure indicator light	LED
Fuel injection indicator light	LED
Immobilizer indicator light	LED ... EU and Australia

CAPACITIES

Fuel tank	16.5 L (4.4/3.6 US/Imp. gal)
Engine oil, oil change	3100 ml (3.3/2.7 US/Imp. qt)
With filter change	3300 ml (3.5/2.9 US/Imp. qt)
Coolant	2.9 L (3.1/2.6 US/Imp. qt)



INDEX

A

ACCESSORY USE AND MOTORCYCLE LOADING	1-2
AIR CLEANER.....	6-11
ALLOW THE ENGINE OIL TO CIRCULATE BEFORE RIDING	4-4
AVOID CONSTANT LOW SPEED	4-3

B

BATTERY	6-9
BRAKES	6-45
BREAKING IN THE NEW TIRES	4-3

C

CARRYING A PASSENGER.....	5-11
CLUTCH	6-35
COOLANT	3-6, 6-37

D

DRIVE CHAIN.....	6-39
------------------	------

E

ENGINE IDLE SPEED INSPECTION.....	6-34
ENGINE OIL	3-4, 6-26
ENGINE STALLING	7-4

F

FRONT WHEEL REMOVAL.....	6-57
FUEL	3-2
FUEL HOSE	6-25
FUEL SUPPLY CHECK.....	7-2
FUEL TANK CAP	2-42
FUSES.....	6-76

G

GEARSHIFT LEVER	2-44
-----------------------	------

I

IGNITION SWITCH	2-7
IGNITION SYSTEM CHECK	7-3
INSPECTION BEFORE RIDING	4-5
INSTRUMENT PANEL	2-10

K

KEY (Canada).....	2-5
KEY (EU and Australia)	2-6

L

LEFT HANDLEBAR.....	2-34
LIGHT BULB REPLACEMENT	6-66
LOCATION OF PARTS	2-2
LUBRICATION POINTS	6-8
LUGGAGE STRAPS.....	2-50

M

MAINTENANCE SCHEDULE	6-2
MAXIMUM ENGINE SPEED	
RECOMMENDATION.....	4-2
MOTORCYCLE CLEANING	8-2

N

NOISE CONTROL SYSTEM	
(AUSTRALIA ONLY).....	1-10

O

OBSERVE YOUR FIRST AND	
MOST CRITICAL SERVICE	4-4

P

PROCEDURE DURING STORAGE.....	8-7
PROCEDURE FOR RETURNING TO	
SERVICE.....	8-7

R

REAR BRAKE PEDAL.....	2-45
REAR WHEEL REMOVAL	6-62
RIDING ON HILLS.....	5-8
RIGHT HANDLEBAR	2-38

S

SAFE RIDING RECOMMENDATION FOR MOTORCYCLE RIDERS.....	1-7
SEAT LOCK AND HELMET HOLDER.....	2-45
SERIAL NUMBER LOCATION	1-9
SIDE STAND	2-50
SIDE STAND/IGNITION INTERLOCK SWITCH.....	6-56
SPARK PLUGS	6-21
STARTING OFF	5-4
STARTING THE ENGINE.....	5-2
STEERING DAMPER MAINTENANCE.....	6-7
STOPPING AND PARKING	5-8
STORAGE PROCEDURE	8-5
SUSPENSION ADJUSTMENT	2-52
SUZUKI DRIVE MODE SELECTOR	2-32

T

THROTTLE CABLE PLAY.....	6-34
TIRES	6-51
TOOLS	6-6

U

USING THE TRANSMISSION.....	5-6
-----------------------------	-----

V

VARY THE ENGINE SPEED.....	4-2
----------------------------	-----



ASAHI DENSO CO., LTD.

1128 Nakajo Hamamatsu-shi Shizuoka-ken, Japan

DECLARATION of CONFORMITY

We, **ASAHI DENSO CO., LTD.** of the above address, hereby declare, at our sole responsibility, that the following product conforms to the Essential Requirements of the Radio and Telecommunications Terminal Equipment Directive 1999/5/EC in accordance with the tests conducted to the appropriate requirements of the relevant standards, as listed herewith.

Product: Immobilizer

Model/ Type Number: SZ144

Directive and Standards used: Radio: EN 300 330-1 V1.5.1 (2006-04)
EN 300 330-2 V1.3.1 (2006-04)

EMC: EN 301 489-3 V1.4.1 (2002-08)
EN 301 489-1 V1.6.1 (2005-09)

Safety: EN 60065:2002

Year of affixing CE marking: 2007

Signature : Michiyuki, Suzuki

Name : Michiyuki Suzuki

Position : Section chief, Engineering Department

Date : March 27, 2007

C E0891

Hereby, ASAHI DENSO CO., LTD, declares that this Immobilizer for Motor Cycle (SZ144) is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Hierbij verklaart ASAHI DENSO CO., LTD dat het toestel Immobilizer for Motor Cycle (SZ144) in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG

Bij deze verklaart ASAHI DENSO CO., LTD dat deze Immobilizer for Motor Cycle (SZ144) voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.

Par la présente ASAHI DENSO CO., LTD déclare que l'appareil Immobilizer for Motor Cycle (SZ144) est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE

Par la présente, ASAHI DENSO CO., LTD déclare que ce Immobilizer for Motor Cycle (SZ144) est conforme aux exigences essentielles et aux autres dispositions de la directive 1999/5/CE qui lui sont applicables

Härmed intygar ASAHI DENSO CO., LTD att denna Immobilizer for Motor Cycle (SZ144) står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Undertegnede ASAHI DENSO CO., LTD erklærer herved, at følgende udstyr Immobilizer for Motor Cycle (SZ144) overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF

Hiermit erklärt ASAHI DENSO CO., LTD, dass sich dieser Immobilizer for Motor Cycle (SZ144) in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMW)

Hiermit erklärt ASAHI DENSO CO., LTD die Übereinstimmung des Gerätes Immobilizer for Motor Cycle (SZ144) mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG. (Wien)

Con la presente ASAHI DENSO CO., LTD dichiara che questo Immobilizer for Motor Cycle (SZ144) è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Por medio de la presente ASAHI DENSO CO., LTD declara que el Immobilizer for Motor Cycle (SZ144) cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE





* 9 9 0 1 1 - 2 3 H 5 0 - 0 1 A *

K8

SUZUKI MOTOR CORPORATION
300 TAKATSUKA, MINAMI, HAMAMATSU, JAPAN

Printed in Japan